26517

Date: July 10, 1995
Prepared by: Chris Smith, Alabama Department of Environmental Management
Site: American Cyanamide
EPA ID. #: ALD008175408
Ref #: 0149

NFRAP APPROVED 8/29/95 BJ

1.0 INTRODUCTION

Under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) the Alabama Department of Environmental Management (ADEM), Field Operations Division, conducted a Site Inspection Prioritization (SIP) on the American Cyanamide site in Mobile, Mobile County, Alabama. The purpose of this investigation was to assess the threat to human health and the environment the site may pose. This included reviewing existing information and evaluating the site under the Hazard Ranking System (HRS).

2.0 SITE DESCRIPTION

2.1 Location

The American Cyanamide site is located in a industrial area of Mobile, Alabama. The site coordinates are 30 44'54" latitude and 88 03'29" longitude. The site is located on Cyanamide Rd. north of the Mobile International Paper Company Plant. It can further be located Township 3S, Range 1W. The exact section in which the site is located is not clearly marked on the map. [1,8]

2.2 Operational History

The American Cyanamide facility is active and currently operating as Cytec Industries Inc. The facility process includes the production of alum, sizing for paper products, and synthetic resins. Some of the products manufactured are: Polyacrylamide in water-in-oil, which is used for wastewater treatment of paper fibers; Cypress 48, which is used as a coating on paper utensils; Polyacrylamide in water/Accostrength 711 also used as a paper coating; Aluminum Sulfate, which is used for water purification and as a paper coating. Some of the materials used by American Cyanamide (Cytec) to produce their products are toluene, styrene, acrylic acid, ammonium hydroxide, sulfuric acid, and formaldehyde. The facility has been operated since 1937 or earlier. [1,2]

3.0 WASTE SOURCE

Cytec is a generator of hazardous waste and is regulated under RCRA. They currently operate a 90 day storage unit and therefore are not classified as a RCRA hazardous waste storage or disposal facility. They are classified as a generator only. Prior to operating the 90 day unit, Cytec operated a hazardous waste drum storage area. Clean

closure for the drum storage area was accepted by ADEM on 9/18/91.
Throughout the years of operation nonhazardous and hazardous waste has been disposed off site. The facility utilizes two surface impoundments on site. One impoundment is used for recycling and recovering water. This impoundment is a cement basin that is 37,800 cubic feet. The second impoundment is clay lined and is used for holding alum mud. The second is 2,037,750 cubic feet. [1,2,3,4,5]

4.0 GROUNDWATER PATHWAY

4.1 Hydrogeology

The site is underlain by Dorovan Levy soils. Dorovan Levy soils are a very poorly drained soils. Permeability of these soils is estimated to be between 1.4E03 to 1.4E04 centimeters per second. They have a high saturation capacity and the water table is near the surface most of the year. [6]

Cytec is located in the Alluvial-Deltaic plain region of the East Gulf Coastal Plain physiographic section. The site is on terrace coastal deposits of Quaternary age which overlays the Citronelle Formation and a thick sequence of Miocene Series undifferentiated. The major aquifers in the area are the Pliocene-Miocene and the Alluvial Coastal. The two aquifers are hydraulically connected. [6]

4.2 Groundwater Targets

Public water is available throughout the entire target distance limit. The Mobile Water Service System, the Prichard Water Works Board and the Saraland Water Service provide water to the residents within the 4 mile radius. The Mobile and the Prichard utilities obtain 100 percent of their water from surface water. Saraland obtains their water from drinking water wells outside the target distance limit. [7]

4.3 Groundwater Conclusions

No groundwater targets were found during this investigation; therefore, it appears that the American Cyanamide (Cytec) site pose no threat to the groundwater pathway.

5.0 SURFACE WATER PATHWAY

5.1 Hydrology

Overland drainage from the facility flows into Hog Bayou an estimated 2000 feet from the furthest point. Hog Bayou flows approximately 0.9 of a mile and flows into Chickasaw Creek. From the convergence of Hog Bayou and Chickasaw Creek the Chickasaw flows an approximate 1.25 miles and empties into the Mobile River. The Mobile River then carries site influenced drainage 8.35 miles and empties into the Mobile Bay. [8]

Site influenced drainage flows into the Mobile Bay 10.5 miles from the PPE. The fifteen target distance limit ends in Mobile Bay. No flow data was found for Hog Bayou or the Mobile River. Hog Bayou is a moderate stream and therefore will fall in the 10-100cfs category. A station on the Tombigbee River, which is roughly the same size as the Mobile River and flows into the Mobile River, was used to get flow data. The Tombigbee River at the Coffeville, Alabama station for calendar year 1987 had a minimum flow of 1010 cfs. Chickasaw Creek has a 62 cfs 2 year 7 day low flow. [8,9,10]

5.2 Surface Water Targets

There are no endangered or threatened aquatic species known to inhabit Hog Bayou or Chickasaw Creek. The Mobile River is known to be inhabited by the federally endangered Alabama red-bellied turtle and the federally threatened Gulf Sturgeon. There is also an estimated 2.9 miles of wetland frontage associated with the surface water pathway.

5.3 Surface Water Conclusions

The surface water pathway does have targets found within the target distance limit, but when considering the presence of source containment and site contaminants it is unlikely that the American Cyanamide site poses an actual contamination threat.

6.0 SOIL EXPOSURE AND AIR PATHWAYS

6.1 Site Conditions

The site is completely fenced and inaccessible to nonemployees. Source areas were contained and all spills have been remediated. No evidence of surface contamination was found during this investigation. [1,5]

6.2 Soil and Air Targets

There were no terrestrial sensitive environments identified during this investigation. The estimated population within the 1 mile radius is 0, 50 and 2500 in the 0-1/4, 1/4-1/2, and 1/2-1 mile radii respectively. There are 103 workers on site. [5,8]

6.3 Soil and Air Conclusions

Considering the lack of contamination the site poses no threat to the Soil or Air Pathways.

7.0 CONCLUSIONS

The Groundwater, Soil and Air Pathways have no threat when considering the HRS. Although the Surface Water Pathway has targets within the target distance limit, it is unlikely that a level of contamination exist that would threaten the targets. This statement is made considering site containment, site contaminants and the current HRS. It is suggested the site NFRAPed.

References:

1) Preliminary Assessment
2) May 11, 1989 Memorandum from Alicia A. Finch to Bernard E. Cox
3) Certified letter dated Sept. 18, 1991 (Closure of drum storage area)
4) Certified letter dated May 10, 1991 (Drum storage area closure plan)
5) Telephone conversation with Tom Hankins (Cytec Environmental Rep.)
6) Geology Report
7) FRDS II, ADEMs Public Drinking Water Database
8) U.S.G.S. 7.5 minute series topographic maps, Mobile and Chickasaw Quadrangles
9) U.S.G.S. Water Resources Data, Alabama Water Year 1990
10) Low-Flow and Flow-Duration Characteristics of Alabama Streams
11) U.S. Fish and Wildlife Service, Federally listed species information

CONFIDENTIAL

APPENDIX C

SITE INSPECTION WORKSHEETS

This appendix consists of worksheets that can be used to generate an SI site score. Completion of these worksheets is not required, but the SI investigator must evaluate an SI score, either by these worksheets, *PREscore*, or other Regional scoring tools.

The worksheets consist of instructions and data tables to be filled in with scores from HRS reference tables. The data tables may also call for Data Type and References.

DATA TYPE: The Data Type columns should be filled in with an H, Q, or + if the data are HRS quality and well documented. The Data Type column should be filled in with an E, X, or - if the data represent estimates, approximations, or are not fully documented. This type identifies data gaps for the expanded SI to investigate.

REFERENCES: The Reference columns should be filled in with coded reference numbers. The numbered reference list should be attached or the numbering should be cross-referenced to the SI Narrative Report.

The SI investigator will need the current Superfund Chemical Data Matrix (SCDM) OSWER Directive 9345.1-13 (revised semi-annually) to complete these worksheets.

SITE INSPECTION WORKSHEETS

CERCLIS IDENTIFICATION NUMBER
ALD008175408

SITE LOCATION

SITE NAME
American Cyanamid

ADDRESS
P.O. Box 1924

CITY	STATE	ZIP CODE	TELEPHONE
Mobile	Alabama	36633	334-457-6601

COORDINATES	TOWNSHIP,RANGE,SECTION
30 44'54" Latitude 88 03'29" Longitude	T3S,R1W

OWNER/OPERATOR IDENTIFICATION

OWNER	OPERATOR
Cytec Industries Inc.	Cytec Industries Inc.
OWNER ADDRESS	**OPERATOR ADDRESS**
Cyanamide Rd.	5 Garret Mountain Plaza
CITY	**CITY**
Mobile	West Paterson
STATE ZIP CODE PHONE#	**STATE ZIP CODE PHONE#**
Al 36614 334/4576601	NJ 07470

SITE EVALUATION

AGENCY/ORGANIZATION
ADEM
INVESTIGATOR
Chris Smith
CONTACT
Jymalyn Redmond
TELEPHONE
334-260-2791

GENERAL INFORMATION

The American Cyanamide facility is active and currently operating as Cytec Industries Inc. The facility process includes the production of alum, sizing for paper products, and synthetic resins. Some of the products manufactured are: Polyacrylamide in water-in-oil, which is used for wastewater treatment of paper fibers; Cypress 48, which is used as a coating on paper utensils; Polyacrylamide in water/Accostrength 711, which is used as a paper coating; Aluminum Sulfate, which is used for water purification and as a paper coating. Some of the materials used by American Cyanamide (Cytec) to produce their products are toluene, styrene, acrylic acid, ammonium hydroxide, sulfuric acid and formaldehyde. The facility has been operating since 1937 or earlier.

Cytec is a generator of hazardous waste and is regulated under RCRA. They currently operate a 90 day storage unit and are not classified as a RCRA hazardous waste storage or disposal facility. They are classified as a generator only. Prior to operating the 90 day unit, Cytec operated hazardous waste drum storage area. Clean closure for the drum storage area was accepted by ADEM on 9/18/91. Throughout the years of operation hazardous waste has been disposed off site. The facility utilizes two surface impoundments on site. One impoundment is used for recycling and recovering water. This impoundment is a cement basin that 37,800 cubic feet. The second impoundment is clay lined and used for holding alum mud. The second impoundment is 2,037,750 cubic feet.

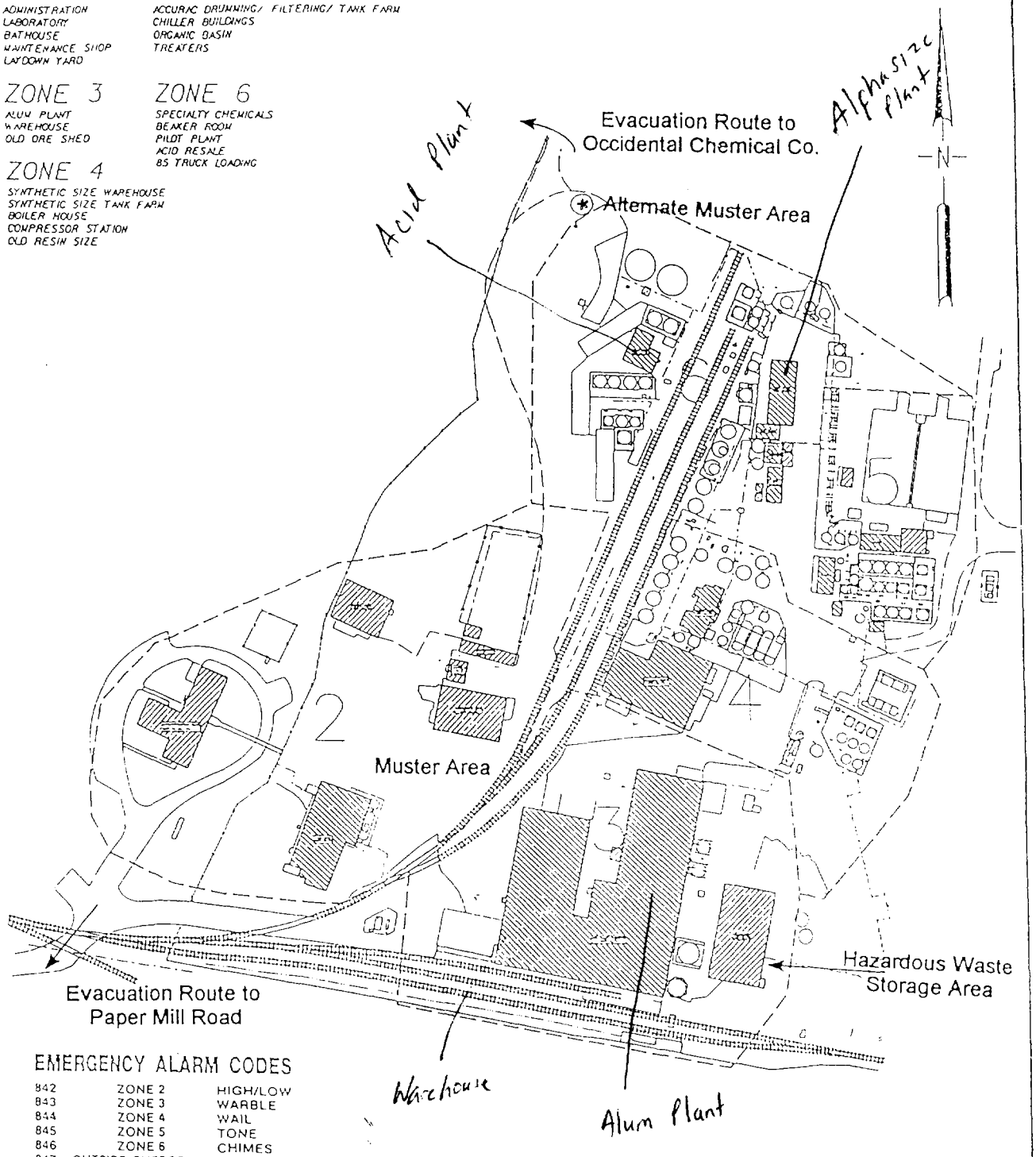
ZONE 2
ADMINISTRATION
LABORATORY
BATHOUSE
MAINTENANCE SHOP
LAYDOWN YARD

ZONE 3
ALUM PLANT
WAREHOUSE
OLD ORE SHED

ZONE 4
SYNTHETIC SIZE WAREHOUSE
SYNTHETIC SIZE TANK FARM
BOILER HOUSE
COMPRESSOR STATION
OLD RESIN SIZE

ZONE 5
ACCURAC DRUMMING/ FILTERING/ TANK FARM
CHILLER BUILDINGS
ORGANIC BASIN
TREATERS

ZONE 6
SPECIALTY CHEMICALS
BEAKER ROOM
PILOT PLANT
ACID RESALE
85 TRUCK LOADING



EMERGENCY ALARM CODES

842	ZONE 2	HIGH/LOW
843	ZONE 3	WARBLE
844	ZONE 4	WAIL
845	ZONE 5	TONE
846	ZONE 6	CHIMES
847	OUTSIDE EMERGENCY ALARM	

MOBILE PLANT

CYTEC

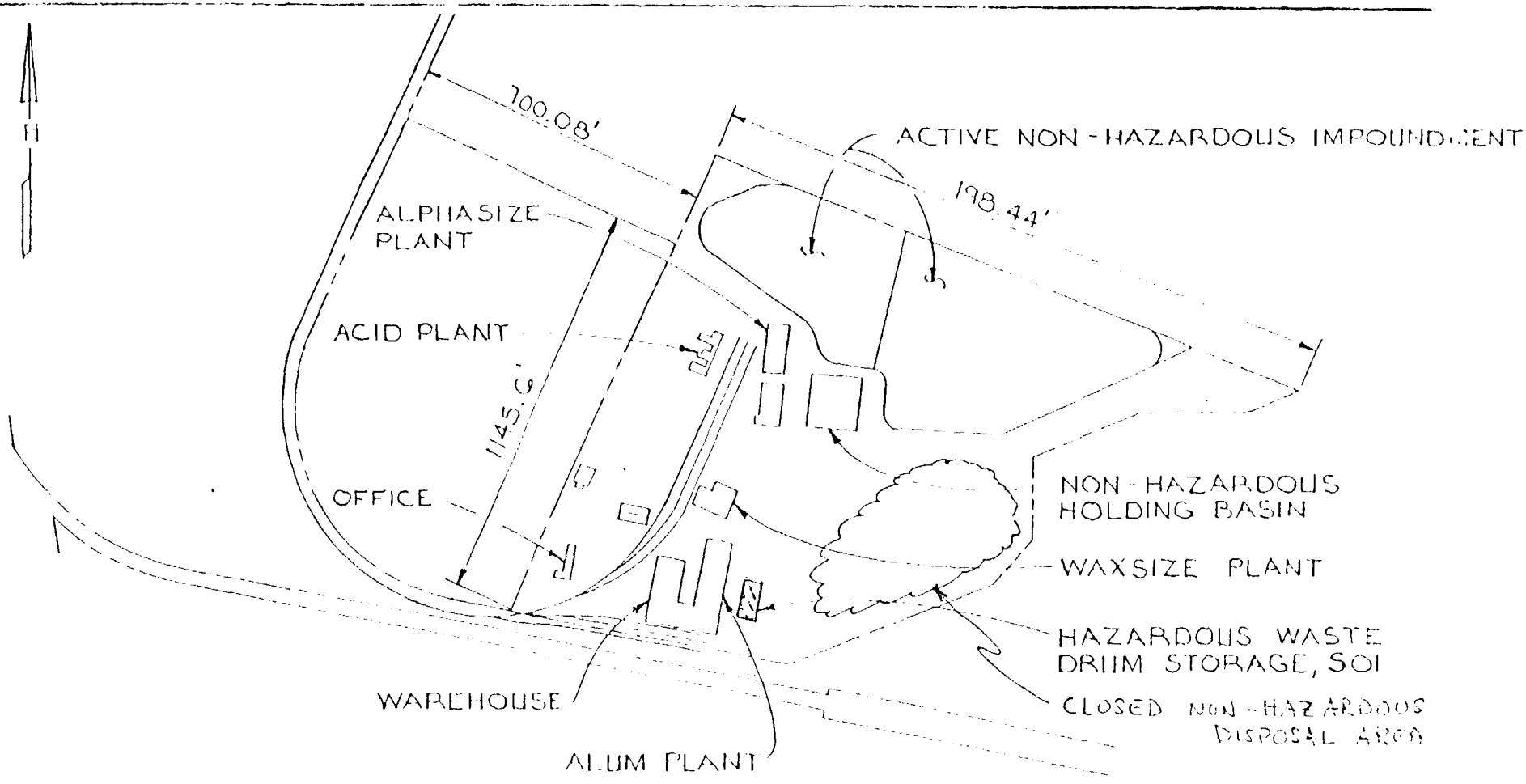
MOBILE, ALABAMA PLANT

EMERGENCY RESPONSE AREAS

PLANT LAYOUT W/HAZARD AREAS SHOWN

LAWLER AND COMPANY
LAND AND INDUSTRIAL SURVEYORS
12719 DAUPHIN ISLAND PARKWAY
CODEN, ALABAMA 36523
(205) 973-0373

Date: NOV., 1990 | Scale: 1"=100' | JOB No. AL92-076



WALDEMAR S. NELSON AND COMPANY
INCORPORATED
ENGINEERS AND ARCHITECTS
1200 ST. CHARLES AVE. NEW ORLEANS, LA.

MOBILE PLANT
AMERICAN CYANAMID CO.
LOCATION PLAN
SCALE 1" = 400'

GENERAL INFORMATION

SOURCE:

Sources of potential contamination associated with the Cytec facility are the closed hazardous waste drum storage area and two surface impoundments. As stated earlier the drum storage area was clean closed on 9/18/91. When the removal or cleanup was conducted, 40 cubic feet of powder residue (6 55 gallon drums) was removed and 4 fifty five gallon drums (approximately 175 gallons) of wash water was collected. The impoundments on site are actively used for holding water and alum mud. One impoundment is 37,800 cubic feet and the other is 2,037,750 cubic feet. The smaller impoundment is a cement basin and the larger impoundment is clay lined.

HAZARDOUS WASTE QUANTITY:

Score without consideration of removal or cleanup:

1 ton=2,000 lbs=1 cubic yard=4 drums=200 gallons

Drum storage area

40 cubic feet * .03704 = 1.4816 cubic yards = approximately 3000 lbs.
6 fifty five gallon drums = approximately 3000 lbs.

as per Tier B Column 7 6000 lbs./5000 lbs. = 1.2

Impoundments

as per Tier C Column 7 37,800/67.5 = 560
2,037,750/67.5 = 30,188.88
Total = 30,750

HWQ = 10,000
as per 2.4.2.2 (consideration of removal action) **HWQ = 100**

GENERAL INFORMATION (continued)

Source Descriptions: Describe all sources at the site. Identify source type and relate to waste disposal operations. Provide source dimensions and the best available waste quantity information. Describe the condition of sources and all containment structures. Cite references.

SOURCE TYPES

Landfill: A man-made (by excavation or construction) or natural hole in the ground into which wastes have come to be disposed by backfilling, or by contemporaneous soil deposition with waste disposal.

Surface Impoundment: A natural topographic depression, man-made excavation, or diked area, primarily formed from earthen materials (lined or unlined) and designed to hold an accumulation of liquid wastes, wastes containing free liquids, or sludges not backfilled or otherwise covered; depression may be wet with exposed liquid or dry if deposited liquid has evaporated, volatilized or leached; structures that may be described as lagoon, pond, aeration pit, settling pond, tailings pond, sludge pit; also a surface impoundment that has been covered with soil after the final deposition of waste materials (i.e., buried or backfilled).

Drum: A portable container designed to hold a standard 55-gallon volume of wastes.

Tank and Non-Drum Container: Any device, other than a drum, designed to contain an accumulation of waste that provides structural support and is constructed primarily of fabricated materials (such as wood, concrete, steel, or plastic); any portable or mobile device in which waste is stored or otherwise handled.

Contaminated Soil: An area or volume of soil onto which hazardous substances have been spilled, spread, disposed, or deposited.

Pile: Any non-containerized accumulation above the ground surface of solid, non-flowing wastes; includes open dumps. Some types of waste piles are:

- Chemical Waste Pile: A pile consisting primarily of discarded chemical products, by-products, radioactive wastes, or used or unused feedstocks.
- Scrap Metal or Junk Pile: A pile consisting primarily of scrap metal or discarded durable goods (such as appliances, automobiles, auto parts, batteries, etc.) composed of materials containing hazardous substances.
- Tailings Pile: A pile consisting primarily of any combination of overburden from a mining operation and tailings from a mineral mining, beneficiation, or processing operation.
- Trash Pile: A pile consisting primarily of paper, garbage, or discarded non-durable goods containing hazardous substances.

Land Treatment: Landfarming or other method of waste management in which liquid wastes or sludges are spread over land and tilled, or liquids are injected at shallow depths into soils.

Other: Sources not in categories listed above.

SI TABLE 1: HAZARDOUS WASTE QUANTITY (HWQ) SCORES FOR SINGLE SOURCE SITES AND FORMULAS FOR MULTIPLE SOURCE SITES

		Single Source Sites (assigned HWQ scores)	
(Column 1) TIER	(Column 2) Source Type	(Column 3) HWQ = 10	(Column 4) HWQ = 100
A Hazardous Constituent Quantity	N/A	HWQ = 1 if Hazardous Constituent Quantity data are complete HWQ = 10 if Hazardous Constituent Quantity data are not complete	>100 to 10,000 lbs
B Hazardous Wastestream Quantity	N/A	≤ 500,000 lbs	>500,000 to 50 million lbs
C Volume	Landfill	≤ 6.75 million ft^3 ≤ 250,000 yd^3	>6.75 million to 675 million ft^3 >250,000 to 25 million yd^3
	Surface impoundment	≤6,750 ft^3 ≤250 yd^3	>6,750 to 675,000 ft^3 >250 to 25,000 yd^3
	Drums	≤1,000 drums	>1,000 to 100,000 drums
	Tanks and non-drum containers	≤50,000 gallons	>50,000 to 5 million gallons
	Contaminated soil	≤6.75 million ft^3 ≤250,000 yd^3	>6.75 million to 675 million ft^3 >250,000 to 25 million yd^3
	Pile	≤6,750 ft^3 ≤250 yd^3	>6,750 to 675,000 ft^3 >250 to 25,000 yd^3
	Other	≤6,750 ft^3 ≤250 yd^3	>6,750 to 675,000 ft^3 >250 to 25,000 yd^3
D Area	Landfill	≤340,000 ft^2 ≤7.8 acres	>340,000 to 34 million ft^2 >7.8 to 780 acres
	Surface impoundment	≤1,300 ft^2 ≤0.029 acres	>1,300 to 130,000 ft^2 >0.029 to 2.9 acres
	Contaminated soil	≤3.4 million ft^2 ≤78 acres	> 3.4 million to 340 million ft^2 > 78 to 7,800 acres
	Pile	≤1,300 ft^2 ≤0.029 acres	>1,300 to 130,000 ft^2 >0.029 to 2.9 acres
	Land treatment	≤27,000 ft^2 ≤0.62 acres	>27,000 to 2.7 million ft^2 >0.62 to 62 acres

TABLE 1 (CONTINUED)

Single Source Sites (assigned HWQ scores)		Multiple Source Sites		
(Column 5) HWQ = 10,000	(Column 6) HWQ = 1,000,000	(Column 7) Divisors for Assigning Source WQ Values	(Column 2) Source Type	(Column 1) TIER
>10,000 to 1 million lbs	> 1 million lbs	lbs ÷ 1	N/A	A Hazardous Constituent Quantity
>50 million to 5 billion lbs	> 5 billion lbs	lbs ÷ 5,000	N/A	B Hazardous Wastestream Quantity
>675 million to 67.5 billion ft^3 >25 million to 2.5 billion yd^3	> 67.5 billion ft^3 > 2.5 billion yd^3	ft^3 ÷ 67,500 yd^3 ÷ 2,500	Landfill	C Volume
>675,000 to 67.5 million ft^3 >25,000 to 2.5 million yd^3	> 67.5 million ft^3 > 2.5 million yd^3	ft^3 ÷ 67.5 yd^3 ÷ 2.5	Surface Impoundment	
>100,000 to 10 million drums	> 10 million drums	drums ÷ 10	Drums	
>5 million to 500 million gallons	> 500 million gallons	gallons ÷ 500	Tanks and non-drum containers	
>675 million to 67.5 billion ft^3 >25 million to 2.5 billion yd^3	> 67.5 billion ft^3 > 2.5 billion yd^3	ft^3 ÷ 67,500 yd^3 ÷ 2,500	Contaminated Soil	
>675,000 to 67.5 million ft^3 >25,000 to 2.5 million yd^3	> 67.5 million ft^3 > 2.5 million yd^3	ft^3 ÷ 67.5 yd^3 ÷ 2.5	Pile	
>675,000 to 67.5 million ft^3 >25,000 to 2.5 million yd^3	> 67.5 million ft^3 > 2.5 million yd^3	ft^3 ÷ 67.5 yd^3 ÷ 2.5	Other	
>34 million to 3.4 billion ft^2 >780 to 78,000 acres	> 3.4 billion ft^2 >78,000 acres	ft^2 ÷ 3,400 acres ÷ 0.078	Landfill	D Area
>130,000 to 13 million ft^2 >2.9 to 290 acres	> 13 million ft^2 > 290 acres	ft^2 ÷ 13 acres ÷ 0.00029	Surface Impoundment	
> 340 million to 34 billion ft^2 > 7,800 to 780,000 acres	> 34 billion ft^2 > 780,000 acres	ft^2 ÷ 34,000 acres ÷ 0.78	Contaminated Soil	
> 130,000 to 13 million ft^2 > 2.9 to 290 acres	> 13 million ft^2 > 290 acres	ft^2 ÷ 13 acres ÷ 0.00029	Pile	
>2.7 million to 270 million ft^2 >62 to 6,200 acres	> 270 million ft^2 > 6,200 acres	ft^2 ÷ 270 acres ÷ 0.0062	Land Treatment	

HAZARDOUS WASTE QUANTITY (HWQ) CALCULATION

For each migration pathway, evaluate HWQ associated with sources that are available (i.e., incompletely contained) to migrate to that pathway. (Note: If *Actual Contamination Targets* exist for ground water, surface water, or air migration pathways, assign the calculated HWQ score or 100, whichever is greater, as the HWQ score for that pathway.) For each source, evaluate HWQ for one or more of the four tiers (SI Table 1; HRS Table 2-5) for which data exist: constituent quantity, wastestream quantity, source volume, and source area. Select the tier that gives the highest value as the source HWQ. Select the source volume HWQ rather than source area HWQ if data for both tiers are available.

Column 1 of SI Table 1 indicates the quantity tier. Column 2 lists source types for the four tiers. Columns 3, 4, 5, and 6 provide ranges of waste amount for sites with only one source, corresponding to HWQ scores at the tops of the columns. Column 7 provides formulas to obtain source waste quantity values at sites with multiple sources.

1. Identify each source type.
2. Examine all waste quantity data available for each source. Record constituent quantity and waste stream mass or volume. Record dimensions of each source.
3. Convert source measurements to appropriate units for each tier to be evaluated.
4. For each source, use the formulas in the last column of SI Table 1 to determine the waste quantity value for each tier that can be evaluated. Use the waste quantity value obtained from the highest tier as the quantity value for the source.
5. Sum the values assigned to each source to determine the total site waste quantity.
6. Assign HWQ score from SI Table 2 (HRS Table 2-6).

Note these exceptions to evaluate soil exposure pathway HWQ (see HRS Table 5-2):

- The divisor for the area (square feet) of a landfill is 34,000.
- The divisor for the area (square feet) of a pile is 34.
- Wet surface impoundments and tanks and non-drum containers are the only sources for which volume measurements are evaluated for the soil exposure pathway.

SI TABLE 2: HWQ SCORES FOR SITES

Site WQ Total	HWQ Score
0	0
1[a] to 100	1[b]
> 100 to 10,000	100
> 10,000 to 1 million	10,000
> 1 million	1,000,000

[a] If the WQ total is between 0 and 1, round it to 1.
[b] If the hazardous constituent quantity data are not complete, assign the score of 10.

WASTE CHARACTERIZATION WORKSHEET

Site Name: American Cyanamide

References: PA. SCDM

Sources:

1. Drum storage area

Source	Hazardous Substance	Toxicity	GW Mobility	GW Tox/Mobility	SW Per	SW Tox/Per	SW Bioac Pot.	SW Tox/Per/ Bioac	SW Ecotox	SW Ecotox/ Per	SW Ecotox/Per/ Bioac
1	Acrylamide	1000	1	1000	1	1000	5	5.0E+3	10	10	5.0E+1
1	Formaldehyde	10	1	10	1	10	.5	5.0E+0			
1	Sytrene	10	.01	.1	.4	4	50	2.0E+2	100	40	2.0E+3
1	Sulfuric acid	1000	1	1000	.4	400	.5	2.0E+2	10	4	2.0E+0
1	Toluene	10	.01	.1	.4	4	50	2.0E+2	100	40	2.0E+3

Ground Water Observed Release Substances Summary Table

On SI Table 4, list the hazardous substances associated with the site detected in ground water samples for that aquifer. Include only those substances directly observed or with concentrations significantly greater than background levels. Obtain toxicity values from the Superfund Chemical Data Matrix (SCDM). Assign mobility a value of 1 for all observed release substances regardless of the aquifer being evaluated. For each substance, multiply the toxicity by the mobility to obtain the toxicity/mobility factor value; enter the highest toxicity/mobility value for the aquifer in the space provided.

Ground Water Actual Contamination Targets Summary Table

If there is an observed release at a drinking water well, enter each hazardous substance meeting the requirements for an observed release by well and sample ID on SI Table 5 and record the detected concentration. Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For MCL and MCLG benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population using the well as a Level I target. If these percentages are less than 100% or all are N/A, evaluate the population using the well as a Level II target for that aquifer.

SI TABLE 4: GROUND WATER OBSERVED RELEASE SUBSTANCES (BY AQUIFER)

Sample ID	Hazardous Substance	Bckgrd. Conc.	Toxicity/ Mobility	References
		Highest Toxicity/Mobility		

SI TABLE 5: GROUND WATER ACTUAL CONTAMINATION TARGETS

Well ID: _____ Level I _____ Level II _____ Population Served _____ References _____

Sample ID	Hazardous Substance	Conc. (µg/L)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
			Highest Percent		Sum of Percents		Sum of Percents	

Well ID: _____ Level I _____ Level II _____ Population Served _____ References _____

Sample ID	Hazardous Substance	Conc. (µg/L)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
			Highest Percent		Sum of Percents		Sum of Percents	

GROUNDWATER PATHWAY

Groundwater use:

The site is underlain by Dorovan Levy soils. Dorovan Levy soils are a very poorly drained soils. Permeability of these soils is estimated to be between 1.4E03 to 1.4E04 centimeters per second. They have a high saturation capacity and the water table is near the surface most of the year.

Cytec is located in the Alluvial-Deltaic plain region of the East Gulf Coastal Plain physiographic section. The site is on terrace coastal deposits of Quaternary age which overlays the Citronelle Formation and thick sequence of Miocene Series undifferentiated. The major aquifers in the area are the Pliocene-Miocene and the Alluvial Coastal. The two aquifers are hydraulically connected.

Public water is available throughout the entire target distance limit. The Mobile Water Service System, the Prichard Water Works Board and the Saraland Water Service provide water to the residents within the 4 mile radius. The Mobile and Prichard utilities obtain 100 percent of their water from surface water. Saraland obtains their water from drinking water wells outside the target distance limit.

GROUND WATER PATHWAY WORKSHEET

LIKELIHOOD OF RELEASE	Score	Data Type	Refs
1. OBSERVED RELEASE: If sampling data or direct observation support a release to the aquifer, assign a score of 550. Record observed release substances on SI Table 4.			
2. POTENTIAL TO RELEASE: Depth to aquifer: _____feet. If sampling data do not support a release to the aquifer, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Optionally, evaluate potential to release according to HRS Section 3.	500		
LR =	500		

TARGETS			
Are any wells part of a blended system? Yes____ No_____ If yes, attach a page to show apportionment calculations.			
3. ACTUAL CONTAMINATION TARGETS: If analytical evidence indicates that any target drinking water well for the aquifer has been exposed to a hazardous substance from the site, evaluate the factor score for the number of people served (SI Table 5). Level I: _____ people x 10 = _____ Level II: _____ people x 1 = _____ **Total =**	0		
4. POTENTIAL CONTAMINATION TARGETS: Determine the number of people served by drinking water wells for the aquifer or overlying aquifers that are not exposed to a hazardous substance from the site; record the population for each distance category in SI Table 6a or 6b. Sum the population values and multiply by 0.1.	0		
5. NEAREST WELL: Assign a score of 50 for any Level I Actual Contamination Targets for the aquifer or overlying aquifer. Assign a score of 45 if there are Level II targets but no Level I targets. If no Actual Contamination Targets exist, assign the Nearest Well score from SI Table 6a or 6b. If no drinking water wells exist within 4 miles, assign 0.	0		
6. WELLHEAD PROTECTION AREA (WHPA): If any source lies within or above a WHPA for the aquifer, or if a ground water observed release has occurred within a WHPA, assign a score of 20; assign 5 if neither condition applies but a WHPA is within 4 miles; otherwise assign 0.	0		
7. RESOURCES: Assign a score of 5 if one or more ground water resource applies; assign 0 if none applies. • Irrigation (5 acre minimum) of commercial food crops or commercial forage crops • Watering of commercial livestock • Ingredient in commercial food preparation • Supply for commercial aquaculture • Supply for a major or designated water recreation area, excluding drinking water use	0		
Sum of Targets T=	0		

SI TABLE 6 (From HRS TABLE 3-12): VALUES FOR POTENTIAL CONTAMINATION GROUND WATER TARGET POPULATIONS

SI Table 6a: Other Than Karst Aquifers

Distance from Site	Pop.	Nearest Well (choose highest)	Population Served by Wells within Distance Category												Pop. Value	Ref.
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,000 to 3,000,000		
0 to $\frac{1}{4}$ mile		20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455		
> $\frac{1}{4}$ to $\frac{1}{2}$ mile		18	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122		
> $\frac{1}{2}$ to 1 mile		9	1	5	17	52	167	523	1,669	5,224	16,684	52,239	166,835	522,385		
> 1 to 2 miles		5	0.7	3	10	30	94	294	939	2,939	9,385	29,384	93,845	293,842		
> 2 to 3 miles		3	0.5	2	7	21	68	212	678	2,122	6,778	21,222	67,777	212,219		
>3 to 4 miles		2	0.3	1	4	13	42	131	417	1,306	4,171	13,060	41,709	130,596		
Nearest Well =														Sum =		

SI TABLE 6 (From HRS TABLE 3-12): VALUES FOR POTENTIAL CONTAMINATION GROUND WATER TARGET POPULATIONS (continued)

SI Table 6b: Karst Aquifers

Distance from Site	Pop.	Nearest Well (choose highest)	Population Served by Wells within Distance Category												Pop. Value	Ref.
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,000 to 3,000,000		
0 to $\frac{1}{4}$ mile		20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455		
> $\frac{1}{4}$ to $\frac{1}{2}$ mile		20	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122		
> $\frac{1}{2}$ to 1 mile		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		
> 1 to 2 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		
> 2 to 3 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		
>3 to 4 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		
Nearest Well =															Sum =	

GROUND WATER PATHWAY WORKSHEET (concluded)

WASTE CHARACTERISTICS	Score	Data Type	Does not Apply
8. If any Actual Contamination Targets exist for the aquifer or overlying aquifers, assign the calculated hazardous waste quantity score or a score of 100, whichever is greater; if no Actual Contamination Targets exist, assign the hazardous waste quantity score calculated for sources available to migrate to ground water.	100		
9. Assign the highest ground water toxicity/mobility value from SI Table 3 or 4.	1000		
10. Multiply the ground water toxicity/mobility and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below: (from HRS Table 2-7)			

Product	WC Score
0	0
>0 to <10	1
10 to <100	2
100 to <1,000	3
1,000 to < 10,000	6
10,000 to <1E + 05	10
1E + 05 to <1E + 06	18
1E + 06 to <1E + 07	32
1E + 07 to <1E + 08	56
1E + 08 or greater	100

WC = 10

Multiply LR by T and by WC. Divide the product by 82,500 to obtain the ground water pathway score for each aquifer. Select the highest aquifer score. If the pathway score is greater than 100, assign 100.

GROUND WATER PATHWAY SCORE: $\frac{LR \times T \times WC}{82,500}$ = 0 (Maximum of 100)

$500 \times 0 \times 10 / 82500 = 0$

SURFACE WATER PATHWAY

Hydrology:

Overland drainage from the site flows into Hog Bayou an estimated 2000 feet from the furthest point. From the PPE in Hog Bayou site drainage flows an estimated .9 of a mile and empties into Chickasaw Creek. Chickasaw Creek then carries site drainage 1.25 miles and flows into the Mobile River. The Mobile River flows for 8.35 miles and empties into the Mobile Bay. No flow data was found for Hog Bayou or the Mobile River. Hog Bayou is a moderate stream and therefore will fall in the 10 - 100 cfs category. A station on the Tombigbee River, which is roughly the same size as the Mobile River and drains into the Mobile River, was used to get flow data. The Tombigbee River at the Coffeville, Alabama station for calendar year 1987 had a low flow of 1010 cfs. Chickasaw Creek has a 62 cfs 2 year 7 day low flow.

Targets:

There are no endangered or threatened aquatic species known to inhabit Hog Bayou or Chickasaw Creek. The Mobile River is known to be inhabited by the federally endangered Alabama red-bellied turtle and the federally threatened Gulf Sturgeon. There is also an estimated 2.9 miles of wetland frontage associated with the surface water pathway.

Conclusions:

None of the site contaminants have a bioaccumulation factor of 500 or greater so there is only a potential threat to the Human Food Chain. If level 1actual contamination was established within all the wetland boundaries the environmental threat would be maxed. The endangered and threatened species are not considered because they are found in the Mobile River which is classified for industrial use and receives and has received alot of industrial wastewater discharges. Considering this, attribution would more than likely be a problem. This would also be a factor with a portion of the wetland frontage. Also the sources of potential contamination have containment to prevent migration.

SURFACE WATER PATHWAY

Sketch of the Surface Water Migration Route:
Label all surface water bodies. Include runoff route and drainage direction, probable point of entry, and 15-mile target distance limit. Mark sample locations, intakes, fisheries, and sensitive environments. Indicate flow directions, tidal influence, and rate.

SURFACE WATER PATHWAY

Surface Water Observed Release Substances Summary Table

On SI Table 7, list the hazardous substances detected in surface water samples for the watershed, which can be attributed to the site. Include only those substances in observed releases (direct observation) or with concentration levels significantly above background levels. Obtain toxicity, persistence, bioaccumulation potential, and ecotoxicity values from SCDM. Enter the highest toxicity/persistence, toxicity/persistence/bioaccumulation, and ecotoxicity/persistence/ecobioaccumulation values in the spaces provided.

- TP = Toxicity x Persistence
- TPB = TP x bioaccumulation
- ETPB = EP x bioaccumulation (EP = ecotoxicity x persistence)

Drinking Water Actual Contamination Targets Summary Table

For an observed release at or beyond a drinking water intake, on SI Table 8 enter each hazardous substance by sample ID and the detected concentration. For surface water sediment samples detecting a hazardous substance at or beyond an intake, evaluate the intake as Level II contamination. Obtain benchmark, cancer risk, and reference dose concentrations for each substance from SCDM. For MCL and MCLG benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages of the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population served by the intake as a Level I target. If the percentages are less than 100% or all are N/A, evaluate the population served by the intake as a Level II target.

SI TABLE 7: SURFACE WATER OBSERVED RELEASE SUBSTANCES

Sample ID	Hazardous Substance	Bckgrd. Conc.	Toxicity/ Persistence	Toxicity/ Persis./ Bioaccum	Ecotoxicity/ Persis/ Ecobioaccum	References
		Highest Values				

SI TABLE 8: SURFACE WATER DRINKING WATER ACTUAL CONTAMINATION TARGETS

Intake ID: _____ Sample Type _____ Level I _____ Level II _____ Population Served _____ References _____

Sample ID	Hazardous Substance	Conc. (µg/L)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
			Highest Percent		Sum of Percents		Sum of Percents	

Intake ID: _____ Sample Type _____ Level I _____ Level II _____ Population Served _____ References _____

Sample ID	Hazardous Substance	Conc. (µg/L)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
			Highest Percent		Sum of Percents		Sum of Percents	

SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT WORKSHEET

LIKELIHOOD OF RELEASE– OVERLAND/FLOOD MIGRATION	Score	Data Type	Refs
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7.			
2. POTENTIAL TO RELEASE: Distance to surface water: ____(feet) If sampling data do not support a release to surface water in the watershed, use the table below to assign a score from the table below based on distance to surface water and flood frequency.			
Optionally, evaluate surface water potential to release according to HRS Section 4.1.2.1.2	500		
LR =	500		

Distance to surface water <2500 feet	500
Distance to surface water >2500 feet, and:	
Site in annual or 10-yr floodplain	500
Site in 100-yr floodplain	400
Site in 500-yr floodplain	300
Site outside 500-yr floodplain	100

LIKELIHOOD OF RELEASE GROUND WATER TO SURFACE WATER MIGRATION	Score	Data Type	Refs
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7. NOTE: Evaluate ground water to surface water migration only for a surface water body that meets all of the following conditions: 1) A portion of the surface water is within 1 mile of site sources having a containment factor greater than 0. 2) No aquifer discontinuity is established between the source and the above portion of the surface water body. 3) The top of the uppermost aquifer is at or above the bottom of the surface water. Elevation of top of uppermost aquifer _____ Elevation of bottom of surface water body _____			
2. POTENTIAL TO RELEASE: Use the ground water potential to release. Optionally, evaluate surface water potential to release according to HRS Section 3.1.2.			
LR =			

SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT WORKSHEET (CONTINUED)

DRINKING WATER THREAT TARGETS	Score	Data Type	Refs
Record the water body type, flow, and number of people served by each drinking water intake within the target distance limit in the watershed. If there is no drinking water intake within the target distance limit, assign 0 to factors 3, 4, and 5. Intake Name / Water Body Type / Flow / People Served _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ Are any intakes part of a blended system? Yes _____ No _____ If yes, attach a page to show apportionment calculations. 3. ACTUAL CONTAMINATION TARGETS: If analytical evidence indicates a drinking water intake has been exposed to a hazardous substance from the site, list the intake name and evaluate the factor score for the drinking water population (SI Table 8). _____ , _____ Level I: _____ people x 10 = _____ Level II: _____ people x 1 = _____ **Total =**	0		
4. POTENTIAL CONTAMINATION TARGETS: Determine the number of people served by drinking water intakes for the watershed that have not been exposed to a hazardous substance from the site. Assign the population values from SI Table 9. Sum the values and multiply by 0.1.	0		
5. NEAREST INTAKE: Assign a score of 50 for any Level I Actual Contamination Drinking Water Targets for the watershed. Assign a score of 45 if there are Level II targets for the watershed, but no Level I targets. If no Actual Contamination Drinking Water Targets exist, assign a score for the intake nearest the PPE from SI Table 9. If no drinking water intakes exist, assign 0.	0		
6. RESOURCES: Assign a score of 5 if one or more surface water resource applies; assign 0 if none applies. • Irrigation (5 acre minimum) of commercial food crops or commercial forage crops • Watering of commercial livestock • Ingredient in commercial food preparation • Major or designated water recreation area, excluding drinking water use	0		
SUM OF TARGETS T=	0		

SI TABLE 9 (From HRS Table 4-14): DILUTION-WEIGHTED POPULATION VALUES FOR POTENTIAL CONTAMINATION FOR SURFACE WATER MIGRATION PATHWAY

Type of Surface Water Body	Pop.	Nearest Intake	Number of people									Pop. Value
			0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	
Minimal Stream (<10 cfs)		20	0	4	17	53	164	522	1,633	5,214	16,325	
Small to moderate stream (10 to 100 cfs)		2	0	0.4	2	5	16	52	163	521	1,633	
Moderate to large stream (> 100 to 1,000 cfs)		0	0	0.04	0.2	0.5	2	5	16	52	163	
Large Stream to river (>1,000 to 10,000 cfs)		0	0	0.004	0.02	0.05	0.2	0.5	2	5	16	
Large River (> 10,000 to 100,000 cfs)		0	0	0	0.002	0.005	0.02	0.05	0.2	0.5	16	
Very Large River (>100,000 cfs)		0	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2	
Shallow ocean zone or Great Lake (depth < 20 feet)		0	0	0	0.002	0.005	0.02	0.05	0.2	0.5	2	
Moderate ocean zone or Great Lake (Depth 20 to 200 feet)		0	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2	
Deep ocean zone or Great Lake (depth > 200 feet)		0	0	0	0	0	0.001	0.003	0.008	0.03	0.08	
3-mile mixing zone in quiet flowing river (≥ 10 cfs)		10	0	2	9	26	82	261	817	2,607	8,163	
	Nearest Intake =										Sum =	

References _____

SURFACE WATER PATHWAY

Human Food Chain Actual Contamination Targets Summary Table

On SI Table 10, list the hazardous substances detected in sediment, aqueous, sessile benthic organism tissue, or fish tissue samples (taken from fish caught within the boundaries of the observed release) by sample ID and concentration. Evaluate fisheries within the boundaries of observed releases detected by sediment or aqueous samples as Level II, if at least one observed release substance has a bioaccumulation potential factor value of 500 or greater (see SI Table 7). Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For FDAAL benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate this portion of the fishery as subject to Level I concentrations. If the percentages are less than 100% or all are N/A, evaluate the fishery as a Level II target.

Sensitive Environment Actual Contamination Targets Summary Table

On SI Table 11, list each hazardous substance detected in aqueous or sediment samples at or beyond wetlands or a surface water sensitive environment by sample ID. Record the concentration. If contaminated sediments or tissues are detected at or beyond a sensitive environment, evaluate the sensitive environment as Level II. Obtain benchmark concentrations from SCDM. For AWQC/AALAC benchmarks, determine the highest percentage of benchmark of the substances detected in aqueous samples. If benchmark concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage equals or exceeds 100%, evaluate that part of the sensitive environment subject to Level I concentrations. If the percentage is less than 100%, or all are N/A, evaluate the sensitive environment as Level II.

SI TABLE 10: HUMAN FOOD CHAIN ACTUAL CONTAMINATION TARGETS FOR WATERSHED

Fishery ID: _____ Sample Type _____ Level I _____ Level II _____ References _____

Sample ID	Hazardous Substance	Conc. (mg/kg)	Benchmark Concentration (FDAAL)	% of Benchmark	Cancer Risk Concentration.	% of Cancer Risk Concentration	RfD	% of RfD
			Highest Percent		Sum of Percents		Sum of Percents	

SI TABLE 11: SENSITIVE ENVIRONMENT ACTUAL CONTAMINATION TARGETS FOR WATERSHED

Environment ID: _____ Sample Type _____ Level I _____ Level II _____ Environment Value _____

Sample ID	Hazardous Substance	Conc.. (µg/L)	Benchmark Concentration (AWQC or AALAC)	% of Benchmark	References
			Highest Percent		

Environment ID: _____ Sample Type _____ Level I _____ Level II _____ Environment Value _____

Sample ID	Hazardous Substance	Conc.. (µg/L)	Benchmark Concentration (AWQC or AALAC)	% of Benchmark	References
			Highest Percent		

SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT WORKSHEET

HUMAN FOOD CHAIN THREAT TARGETS	Score	Data Type	Refs

Record the water body type and flow for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a score of 0 at the bottom of this page.

Fishery Name Hog Bayou Water Body Moderate Flow >10 cfs

Species_____ Production_____ lbs/yr
Species_____ Production_____ lbs/yr

Fishery Name_____ Water Body_____ Flow_____ cfs

Species_____ Production_____ lbs/yr
Species_____ Production_____ lbs/yr

Fishery Name_____ Water Body_____ Flow_____ cfs

Species_____ Production_____ lbs/yr
Species_____ Production_____ lbs/yr

FOOD CHAIN INDIVIDUAL

7. ACTUAL CONTAMINATION FISHERIES:

If analytical evidence indicates that a fishery has been exposed to a hazardous substance with a bioaccumulation factor greater than or equal to 500 (SI Table 10), assign a score of 50 if there is a Level I fishery. Assign 45 if there is a Level II fishery, but no Level I fishery.

8. POTENTIAL CONTAMINATION FISHERIES:

If there is a release of a substance with a bioaccumulation factor greater than or equal to 500 to a watershed containing fisheries within the target distance limit, but there are no Level I or Level II fisheries, assign a score of 20.

If there is no observed release to the watershed, assign a value for potential contamination fisheries from the table below using the lowest flow at all fisheries within the target distance limit:

Lowest Flow	FCI Value
<10 cfs	20
10 to 100 cfs	2 ✓
>100 cfs, coastal tidal waters, oceans, or Great Lakes	0
3-mile mixing zone in quiet flowing river	10

FCI Value = 2

SUM OF TARGETS T = 2

SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT WORKSHEET

When measuring length of wetlands that are located on both sides of a surface water body, sum both frontage lengths. For a sensitive environment that is more than one type, assign a value for each type.

ENVIRONMENTAL THREAT TARGETS	Score	Data Type	Refs

Record the water body type and flow for each surface water sensitive environment within the target distance (see SI Table 12). If there is no sensitive environment within the target distance limit, assign a score of 0 at the bottom of the page.

Environment Name	Water Body Type	Flow
Federally Endangered	Large River	>1000 cfs
Federally Threatened	Large River	>1000 cfs
Wetland	Moderate Stream	>10 cfs
Wetland	Large Stream	62 cfs
Wetland	Large River	>1000 cfs

9. ACTUAL CONTAMINATION SENSITIVE ENVIRONMENTS: If sampling data or direct observation indicate any sensitive environment has been exposed to a hazardous substance from the site, record this information on SI Table 11, and assign a factor value for the environment (SI Tables 13 and 14).

Environment Name	Environment Type and Value (SI Tables 13 & 14)	Multiplier (10 for Level I, 1 for Level II)	Product
		x =	
		x =	
		x =	
		x =	
		Sum =	

10. POTENTIAL CONTAMINATION SENSITIVE ENVIRONMENTS:

Flow	Dilution Weight (SI Table 12)		Environment Type and Value (SI Tables 13 & 14)		Pot. Cont.	Product
>1000 cfs	.001	x	75	x	0.1 =	.0075
>1000 cfs	.001	x	75	x	0.1 =	.0075
>10 cfs	.1	x	25	x	0.1 =	.25
62 cfs	.1	x	50	x	0.1 =	.50
>1000 cfs	.001	x	25	x	0.1 =	.0025
					Sum =	.7675

T = .7675

SI TABLE 12 (HRS Table 4-13): SURFACE WATER DILUTION WEIGHTS

Type of Surface Water Body		Assigned Dilution Weight
Descriptor	**Flow Characteristics**	
Minimal stream	< 10 cfs	1
Small to moderate stream	10 to 100 cfs	0.1
Moderate to large stream	> 100 to 1,000 cfs	0.01
Large stream to river	> 1,000 to 10,000 cfs	0.001
Large river	> 10,000 to 100,000 cfs	0.0001
Very large river	> 100,000 cfs	0.00001
Coastal tidal waters	Flow not applicable; depth not applicable	0.001
Shallow ocean zone or Great Lake	Flow not applicable; depth less than 20 feet	0.001
Moderate depth ocean zone or Great Lake	Flow not applicable; depth 20 to 200 feet	0.0001
Deep ocean zone or Great Lake	Flow not applicable; depth greater than 200 feet	0.000005
3-mile mixing zone in quiet flowing river	10 cfs or greater	0.5

SI TABLE 13 (HRS TABLE 4-23): SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES

SENSITIVE ENVIRONMENT	*ASSIGNED VALUE*
Critical habitat for Federal designated endangered or threatened species Marine Sanctuary National Park Designated Federal Wilderness Area Ecologically important areas identified under the Coastal Zone Wilderness Act Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes) National Monument (air pathway only) National Seashore Recreation Area National Lakeshore Recreation Area	100
Habitat known to be used by Federal designated or proposed endangered or threatened species National Preserve National or State Wildlife Refuge Unit of Coastal Barrier Resources System Coastal Barrier (undeveloped) Federal land designated for the protection of natural ecosystems Administratively Proposed Federal Wilderness Area Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary Migratory pathways and feeding areas critical for the maintenance of anadromous fish species within river reaches or areas in lakes or coastal tidal waters in which the fish spend extended periods of time Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding National river reach designated as recreational	75
Habitat known to be used by State designated endangered or threatened species Habitat known to be used by a species under review as to its Federal endangered or threatened status Coastal Barrier (partially developed) Federally designated Scenic or Wild River	50
State land designated for wildlife or game management State designated Scenic or Wild River State designated Natural Area Particular areas, relatively small in size, important to maintenance of unique biotic communities	25
State designated areas for the protection of maintenance of aquatic life under the Clean Water Act	5
Wetlands — See SI Table 14 (Surface Water Pathway) or SI Table 23 (Air Pathway)	

SI TABLE 14 (HRS TABLE 4-24): SURFACE WATER WETLANDS FRONTAGE VALUES

Total Length of Wetlands	Assigned Value
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY

WASTE CHARACTERISTICS — Score

14. If an Actual Contamination Target (drinking water, human food chain, or environmental threat) exists for the watershed, assign the calculated hazardous waste quantity score, or a score of 100, whichever is greater. — Score: 100

15. Assign the highest value from SI Table 7 (observed release) or SI Table 3 (no observed release) for the hazardous substance waste characterization factors below. Multiply each by the surface water hazardous waste quantity score and determine the waste characteristics score for each threat.

	Substance Value		HWQ		Product	WC Score (from Table) (Maximum of 100)
Drinking Water Threat Toxicity/Persistence	—	x	—	=	—	—
Food Chain Threat Toxicity/Persistence Bioaccumulation	5000	x	100	=	5×10^5	18
Environmental Threat Ecotoxicity/Persistence/ Ecobioaccumulation	2000	x	100	=	2×10^5	18

Product	WC Score
0	0
>0 to <10	1
10 to <100	2
100 to <1,000	3
1,000 to < 10,000	6
10,000 to <1E + 05	10
1E + 05 to <1E + 06	18
1E + 06 to <1E + 07	32
1E + 07 to <1E + 08	56
1E + 08 to <1E + 09	100
1E + 09 to <1E + 10	180
1E + 10 to <1E + 11	320
1E + 11 to <1E + 12	560
1E + 12 or greater	1000

SURFACE WATER PATHWAY THREAT SCORES

Threat	Likelihood of Release (LR) Score	Targets (T) Score	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score $\frac{LR \times T \times WC}{82{,}500}$
Drinking Water	—	—	—	(maximum of 100)
Human Food Chain	500	2	18	(maximum of 100) .2182
Environmental	500	.7675	18	(maximum of 60) .0837

SURFACE WATER PATHWAY SCORE (Drinking Water Threat + Human Food Chain Threat + Environmental Threat) — (maximum of 100): .3019

SOIL EXPOSURE PATHWAY

If there is no observed contamination (e.g., ground water plume with no known surface source), do not evaluate the soil exposure pathway. Discuss evidence for no soil exposure pathway.

Soil Exposure Resident Population Targets Summary

For each property (duplicate page 35 as necessary):

If there is an area of observed contamination on the property and within 200 feet of a residence, school, or day care center, enter on Table 15 each hazardous substance by sample ID. Record the detected concentration. Obtain cancer risk, and reference dose concentrations from SCDM. Sum the cancer risk and reference dose percentages for the substances listed. If cancer risk or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the residents and students as Level I. If both percentages are less than 100% or all are N/A, evaluate the targets as Level II.

SI TABLE 15: SOIL EXPOSURE RESIDENT POPULATION TARGETS

Residence ID: ______________________ Level I ______ Level II ______ Population ______________________

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	% of Cancer Risk Conc.	RfD	% of RfD	Toxicity Value	References
			Highest Percent		Sum of Percents		Sum of Percents	

Residence ID: ______________________ Level I ______ Level II ______ Population ______________________

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	% of Cancer Risk Conc.	RfD	% of RfD	Toxicity Value	References
			Highest Percent		Sum of Percents		Sum of Percents	

Residence ID: ______________________ Level I ______ Level II ______ Population ______________________

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	% of Cancer Risk Conc.	RfD	% of RfD	Toxicity Value	References
			Highest Percent		Sum of Percents		Sum of Percents	

SOIL EXPOSURE PATHWAY WORKSHEET
RESIDENT POPULATION THREAT

LIKELIHOOD OF EXPOSURE	Score	Data Type	Refs
1. OBSERVED CONTAMINATION: If evidence indicates presence of observed contamination (depth of 2 feet or less), assign a score of 550; otherwise, assign a 0. Note that a likelihood of exposure score of 0 results in a soil exposure pathway score of 0.			
LE =	0		

TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of observed contamination (HRS section 5.1.3). Level I: _____ people x 10 = _____ Level II: _____ people x 1 = _____ **Sum =**			
3. RESIDENT INDIVIDUAL: Assign a score of 50 if any Level I resident population exists. Assign a score of 45 if there are Level II targets but no Level I targets. If no resident population exists (*i.e.*, no Level I or Level II targets), assign 0 (HRS Section 5.1.3).			
4. WORKERS: Assign a score from the table below for the total number of workers at the site and nearby facilities with areas of observed contamination associated with the site.			
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value for each terrestrial sensitive environment (SI Table 16) in an area of observed contamination.			
6. RESOURCES: Assign a score of 5 if any one or more of the following resources is present on an area of observed contamination at the site; assign 0 if none applies. • Commercial agriculture • Commercial silviculture • Commercial livestock production or commercial livestock grazing			
Total of Targets T=			

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
>1,000	15

Terrestrial Sensitive Environment Type	Value

Sum =

SI TABLE 16 (HRS TABLE 5-5): SOIL EXPOSURE PATHWAY TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

TERRESTRIAL SENSITIVE ENVIRONMENT	*ASSIGNED VALUE*
Terrestrial critical habitat for Federal designated endangered or threatened species National Park Designated Federal Wilderness Area National Monument	100
Terrestrial habitat known to be used by Federal designated or proposed threatened or endangered species National Preserve (terrestrial) National or State terrestrial Wildlife Refuge Federal land designated for protection of natural ecosystems Administratively proposed Federal Wilderness Area Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	75
Terrestrial habitat used by State designated endangered or threatened species Terrestrial habitat used by species under review for Federal designated endangered or threatened status	50
State lands designated for wildlife or game management State designated Natural Areas Particular areas, relatively small in size, important to maintenance of unique biotic communities	25

SOIL EXPOSURE PATHWAY WORKSHEET
NEARBY POPULATION THREAT

LIKELIHOOD OF EXPOSURE	Score	Data Type	Ref.
7. Attractiveness/Accessibility (from SI Table 17 or HRS Table 5-6) Value _____ Area of Contamination (from SI Table 18 or HRS Table 5-7) Value _____ Likelihood of Exposure (from SI Table 19 or HRS Table 5-8)			
LE =			

TARGETS	Score	Data Type	Ref.
8. Assign a score of 0 if Level I or Level II resident individual has been evaluated or if no individuals live within 1/4 mile travel distance of an area of observed contamination. Assign a score of 1 if nearby population is within 1/4 mile travel distance and no Level I or Level II resident population has been evaluated.			
9. Determine the population within 1 mile travel distance that is not exposed to a hazardous substance from the site (*i.e.*, properties that are not determined to be Level I or Level II); record the population for each distance category in SI Table 20 (HRS Table 5-10). Sum the population values and multiply by 0.1.			
T =			

SI TABLE 17 (HRS TABLE 5-6): ATTRACTIVENESS/ACCESSIBILITY VALUES

Area of Observed Contamination	Assigned Value
Designated recreational area	100
Regularly used for public recreation (for example, vacant lots in urban area)	75
Accessible and unique recreational area (for example, vacant lots in urban area)	75
Moderately accessible (may have some access improvements–for example, gravel road) with some public recreation use	50
Slightly accessible (for example, extremely rural area with no road improvement) with some public recreation use	25
Accessible with no public recreation use	10
Surrounded by maintained fence or combination of maintained fence and natural barriers	5
Physically inaccessible to public, with no evidence of public recreation use	0

SI TABLE 18 (HRS TABLE 5-7): AREA OF CONTAMINATION FACTOR VALUES

Total area of the areas of observed contamination (square feet)	Assigned Value
≤ to 5,000	5
> 5,000 to 125,000	20
> 125,000 to 250,000	40
> 250,000 to 375,000	60
> 375,000 to 500,000	80
> 500,000	100

SI TABLE 19 (HRS TABLE 5-8): NEARBY POPULATION LIKELIHOOD OF EXPOSURE FACTOR VALUES

AREA OF CONTAMINATION FACTOR VALUE	ATTRACTIVENESS/ACCESSIBILITY FACTOR VALUE						
	100	75	50	25	10	5	0
100	500	500	375	250	125	50	0
80	500	375	250	125	50	25	0
60	375	250	125	50	25	5	0
40	250	125	50	25	5	5	0
20	125	50	25	5	5	5	0
5	50	25	5	5	5	5	0

SI TABLE 20 (HRS TABLE 5-10): DISTANCE-WEIGHTED POPULATION VALUES FOR NEARBY POPULATION THREAT

Travel Distance Category (miles)	Pop.	Number of people within the travel distance category												Pop. Value
		0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,001	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	
Greater than 0 to $\frac{1}{4}$		0	0.1	0.4	1.0	4	13	41	130	408	1,303	4,081	13,034	
Greater than $\frac{1}{4}$ to $\frac{1}{2}$		0	0.05	0.2	0.7	2	7	20	65	204	652	2,041	6,517	
Greater than $\frac{1}{2}$ to 1		0	0.02	0.1	0.3	1	3	10	33	102	326	1,020	3,258	

Reference(s) _____ Sum =

SOIL EXPOSURE PATHWAY WORKSHEET (concluded)

WASTE CHARACTERISTICS

10.	Assign the hazardous waste quantity score calculated for soil exposure	
11.	Assign the highest toxicity value from SI Table 16	
12.	Multiply the toxicity and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below:	WC =

Product	WC Score
0	0
>0 to <10	1
10 to <100	2
100 to <1,000	3
1,000 to < 10,000	6
10,000 to <1E + 05	10
1E + 05 to <1E + 06	18
1E + 06 to <1E + 07	32
1E + 07 to <1E + 08	56
1E + 08 or greater	100

RESIDENT POPULATION THREAT SCORE:

(Likelihood of Exposure, Question 1;
Targets = Sum of Questions 2, 3, 4, 5, 6)

$$\frac{LE \times T \times WC}{82,500}$$

NEARBY POPULATION THREAT SCORE:

(Likelihood of Exposure, Question 7;
Targets = Sum of Questions 8, 9)

$$\frac{LE \times T \times WC}{82,500}$$

SOIL EXPOSURE PATHWAY SCORE:
Resident Population Threat + Nearby Population Threat

(Maximum of 100)

SITE SCORE CALCULATION	S	S^2
GROUND WATER PATHWAY SCORE (S_{GW})	0	-
SURFACE WATER PATHWAY SCORE (S_{SW})	.3019	.0911
SOIL EXPOSURE (S_S)	0	-
AIR PATHWAY SCORE (S_A)	0	-
SITE SCORE $\sqrt{\frac{S_{GW}^2+S_{SW}^2+S_S^2+S_A^2}{4}}$ =		.1510

COMMENTS

References:

1) HRS
2) SCDM 6/30/94 version
3) Preliminary Assessment
4) May 11, 1989 Memorandum from Alicia A. Finch to Bernard E. Cox
5) Certified letter dated Sept. 18, 1991 (Closure of drum storage area)
6) Certified letter dated May 10, 1991 (Drum storage area closure plan)
7) Telephone conversation with Tom Hankins (Cytec Environmental Rep.)
8) Geology Report
9) FRDS II, ADEMs Public Drinking Water Database
10) U.S.G.S. 7.5 minute series topographic maps, Mobile and Chickasaw Quadrangles
11) U.S.G.S. Water Resources Data, Alabama Water Year 1990
12) Low-Flow and Flow-Duration Characteristics of Alabama Streams
13) U.S. Fish and Wildlife Service, Federally listed species information

Reference 2

ADEM

TSD

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Guy Hunt
Governor

Leigh Pegues, Director

1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36130
205/271-7700

Field Offices:

Unit 806, Building 8
225 Oxmoor Circle
Birmingham, AL
35209
205/942-6168

P.O. Box 953
Decatur, AL
35602
205/353-1713

2204 Perimeter Road
Mobile, AL
36615
205/479-2336

May 11, 1989

Originator	Section Chief
Branch Chief	Division Chief

M E M O R A N D U M

TO: Bernard E. Cox, Jr., Chief
Hazardous Waste Branch
Land Division

THROUGH: Steve O. Jenkins, Chief
Compliance Section
Hazardous Waste Branch

FROM: Alicia A. Finch
Compliance Section
Hazardous Waste Branch

RE: Trip Report - American Cyanamid Company
USEPA ID No. ALD 008 175 408

On March 14, 1989, Alicia A. Finch of the Hazardous Waste Branch inspected American Cyanamid Company. The purpose of the inspection was to determine the facility's compliance with the Chapter 14-6 interim status permit standards contained in Division 14 of the ADEM Administrative Code.

The contact was Mr. Tom Hankins, Safety Manager. The inspection began at 4:15 p.m.

American Cyanamid Company is a chemical manufacturer. Some of the products manufactured are as follows: (1) Polyacrylamide in Water-in-Oil Emulsion is used for wastewater treatment and as a treatment of paper fibers; (2) Cypres 48 is used as a coating on paper utensils; (3) Polyacrylamide in Water/Accostrength 711 is used as a paper coating; (4) Aluminum Sulfate is used for water purification and as a paper coating. These are just a few of the products produced by the facility.

The hazardous waste produced at the facility is generated from the spill of materials which are used to make the above mentioned products. Any defective finished product is tested and then shipped as hazardous waste if there is need to do so.

Some of the materials used by Cyanamid to produce their products are toluene, styrene, acrylic acid, ammonium hydroxide, sulfuric acid, and formaldehyde.

Docket 33

The generation of hazardous waste is very rare at the facility. Cyanamid has submitted a closure plan for the container storage area which is the facility's only RCRA unit. The area will later be converted to a 90-day storage area. At the time of inspection, there was no waste in the storage area.

The facility has a contingency plan but all of the RCRA related material was not in one place at the time of inspection. I did not find any information on arrangements with local authorities; a complete information on the names, addresses, and phone numbers of the emergency coordinators; or a complete list of the location and description of emergency equipment.

Mr. Hankins informed me that copies of the contingency plan have not been sent to local authorities.

A "No Smoking" sign will have to be placed in the storage area after it is converted to a 90 day storage area. No wastes are in the area as of now.

AAF/kap

File: TSD

Reference 3

ADEM

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

1751 Cong. W. L. Dickinson Drive
Montgomery, AL
36130
(205) 271-7700
FAX 271-7950
270-5612

Field Offices:

110 Vulcan Road
Birmingham, AL
35209
(205) 942-6168
FAX 941-1603

P.O. Box 953
Decatur, AL
35602
(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
36615
(205) 479-2336
FAX 479-2593

Guy Hunt
Governor

September 18, 1991

CERTIFIED MAIL P 624 156 849
RETURN RECEIPT REQUESTED

Mr. R. B. Melton
American Cyanamid Company
Post Office Box 1924
Mobile, Alabama 36633

Dear Mr. Melton:

Re: Certification of Closure
USEPA Identification Number ALD 008 175 408

The Department has reviewed American Cyanamid's Certification of Closure dated August 19, 1991. The Report of Closure Activities, which was dated May 10, 1991, was resubmitted to the Department as requested to include the correctly signed certification. Upon examination of the report and certification, it appears that the Hazardous Waste Drum Storage Area has been closed to satisfy the requirements for clean closure in accordance with Rule 335-14-6-.07 of the ADEM Administrative Code.

The closed storage area may be used as a generator (less than 90 days) storage area. American Cyanamid is also released from the financial requirements of Rule 335-14-6-.08 of the ADEM Administrative Code.

Should questions arise concerning this matter, please contact Ms. Alicia A. Finch of the RCRA Compliance Branch at (205)271-7726.

Sincerely,

Leigh Pegues
Director

LP/AAF/sdm:#1420
c: Mr. John Dickinson, Chief
Waste Compliance Section
USEPA Region IV

Ms. Janet F. Lassitter
RCRA Compliance Branch
Land Division

Mr. Abe Oberkor
Special Services Unit
Land Division

Docket 52

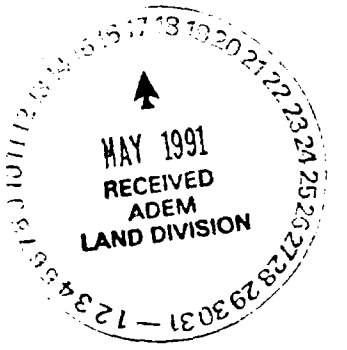
Printed on Recycled Paper

CYANAMID

Reference 4

American Cyanamid Company
P.O. Box 1924
Mobile, AL 36633
(205) 457-6601

May 10, 1991



CERTIFIED MAIL - RETURN RECEIPT

Mr. Steve O. Jenkins, Chief
RCRA Compliance Branch
Land Division
Alabama Department of Environmental Management
1751 Cong. W. L. Dickinson Drive
Montgomery, AL 36130

Re: Report of Closure Activities
USEPA Identification Number ALD 008 175 408

Dear Mr. Jenkins:

Enclosed is the documentation for clean closure of the American Cyanamid Company, Mobile, AL Plant Hazardous Waste Drum Storage Area. Clean closure for all constituents except Formaldehyde had previously been accepted in a letter from ADEM dated October 29, 1990. In that letter Cyanamid was directed to reclean the Storage Area and resample for Formaldehyde. This work was preformed during December 1990.

The sampling and analytical program was conducted by Thompson Engineering Testing, Inc. Their report dated February 15, 1991, summarizing the sampling of the pad and back ground soil and analysis of these samples for Formaldehyde is enclosed. The Thompson Engineering Report documents that the results of all samples taken were less than the detection limits for the analysis.

Also enclosed is the letter from Mr. Emery E. Baya, P.E. (Alabama Registration Number 11290) dated April 24, 1991. This letter certifies that the drum storage area closure activities were performed in accordance with the provisions of the approved closure plan.

File: Mobile Co.; American Cyanamid; TSD

file after # 49

Docket C

CYANAMID

These documents are submitted as evidence of the final clean closure of the Hazardous Waste Storage Area at Cyanamid's Mobile, AL Plant. Upon ADEM's acceptance of the attached clean closure documents, the Mobile Plant will no longer be classified as a RCRA Hazardous Waste Storage Facility. We do, however, wish to retain our EPA Identification Number as a generator only.

If you have any additional questions please contact me at 205-457-6601.

Sincerely,

AMERICAN CYANAMID COMPANY

T. E. Hankins

T.E. Hankins
Manager Process Safety

TEH

Enclosures

THOMPSON ENGINEERING TESTING, INC.

Geotechnical, Materials and Environmental Engineers • Laboratories

Main Office and Laboratories
3707 Cottage Hill Road • 205/666-2443

Nondestructive Testing and Examination
4234 Halls Mill Road • 205/666-1435

P.O. Drawer 9637 Mobile, Alabama 36691

RECEIVED
APR 26 1991
MOBILE PLANT

April 24, 1991

American Cyanamid Company
P.O. Box 1924
Mobile, Alabama 36633

Attention: Mr. Tom Hankins

Subject: Drum Storage Area Closure
Plan Certification
THOMPSON Project No.: A89-083

Gentlemen:

Please reference Thompson Engineering Testing, Inc. (THOMPSON) report dated February 15, 1991 and prior related correspondence.

Reference is also made to American Cyanamid Company letter dated April 12, 1991 which provided documentation of the disposition of wash water and bauxite ore residue generated from the storage area concrete slab closure operations. It is our understanding that American Cyanamid Company has determined that, since the wash water and bauxite residue were used in product formulation and not declared a solid waste, the disposition of these materials satisfies applicable Federal and State requirements.

Remaining aspects of the closure plan performance and analytical test results have been documented in referenced prior reports.

CERTIFICATION

The undersigned hereby certifies that the drum storage area closure activities were performed in accordance with the provisions of the approved closure plan.

If there are any questions or if further information is needed, please advise.

Respectfully,

THOMPSON ENGINEERING TESTING, INC.

Emery E. Baya, P.E.
V.P., Environmental Services
Alabama Registration No. 11290

EEB/mc:91112

THOMPSON ENGINEERING TESTING, INC.

Geotechnical, Materials and Environmental Engineers • Laboratories

Main Office and Laboratories
3707 Cottage Hill Road • 205/666-2443

Nondestructive Testing and Examination
4234 Halls Mill Road • 205/666-1435

P.O. Drawer 9637 Mobile, Alabama 36691

RECEIVED

FEB 22 1991

MOBILE PLANT

February 15, 1991

American Cyanamid Company
P.O. Box 1924
Mobile, AL 36633

Attn: Mr. Tom Hankins

Subject: Drum Storage Area Closure
Formaldehyde Analyses of Wipe
Tests and Soil Samples
THOMPSON Project No.: A89-083

Gentlemen:

Please reference the Drum Storage Area Closure Plan dated February 10, 1989 (revised July 14, 1989) and approved by the Alabama Department of Environmental Management (ADEM). Reference is also made to our report dated December 4, 1989 which presented results of initial storage area sampling and, as well, subsequent correspondence including: (1) ADEM's letter of March 29, 1990, (2) American Cyanamid Company's letter of July 5, 1990, and, (3) ADEM's letter of October 29, 1990.

In response to ADEM and American Cyanamid Company agreements as outlined in the referenced correspondence, Thompson Engineering Testing, Inc. (THOMPSON) was authorized to perform additional formaldehyde analyses of wipe test and soil samples. This report presents the results of this additional testing.

On December 18, 1990 the undersigned met with Mr. Tom Hankins of American Cyanamid Company during the additional pressure washing/cleaning operations of the former drum storage area slab, which was being performed by Reidel Peterson Services, Inc. In accordance with the referenced Closure Plan, rinse water from the slab washing process was to be collected and stored on an interim basis pending subsequent wipe test analytical results. During that meeting, locations for "baseline/background" wipe test samples were selected from the concrete slab located between Tank Nos. 6 and 8 in the Alum Settling Tank Building which is separate from and west of the Bauxite Storage building containing the former drum storage area. The location for a "background/baseline" soil sample was also selected, that being outside and between the Bauxite

Storage and Alum Settling Tank buildings. The "baseline/background" soil sample location was for the purpose of comparison with a soil sample to be collected from a discontinuity in the drum storage area slab at its north end (the same location sampled during the referenced prior analytical testing).

Sampling was performed on December 19, 1990 by Michael Nance of Savannah Laboratories and Environmental Services, Inc. A description of the sampling and the results of analyses (Log No. MO-15145) are presented in the attached report.

All drum storage area and background/baseline wipe test formaldehyde analyses were reported as less than 5.0 ug/100cm^2 (micrograms per 100 square centimeters). The drum storage area and background/baseline soil formaldehyde analyses were reported as less than 200 ug/kg dw (micrograms per kilogram dry weight), which is equivalent to less than 0.2 mg/kg dw (parts per million-ppm).

These analytical results, when assessed according to the Closure Plan, indicate that acceptance criteria are satisfied. Accordingly, we are prepared to issue the Professional Engineer's certification pending documentation of final acceptable disposition of the storage area rinse water collected during the slab washing process.

If there are any questions or if further information is needed, please advise.

Respectfully,

THOMPSON ENGINEERING TESTING, INC.

Emery E. Baya, P.E.
V.P., Environmental Services
Alabama Registration No. 11290

EEB/cs

Attachment (as stated)

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

900 Lakeside Drive • Mobile, Alabama 36609 • (205) 666-6633 • Fax (205) 666-6696

January 29, 1991

Mr. Emery E. Baya
Thompson Engineering & Testing, Inc.
P. O. Drawer 9637
Mobile, AL 36609

RE: Results of formaldehyde sampling and analysis at the drum storage area, American Cyanamid Company; Mobile, Alabama

Dear Mr. Baya:

Formaldehyde determinations were performed on wipe tests and soils collected December 19, 1990 from the American Cyanamid Company in Mobile, Alabama.

Five wipe tests (S-4, S-5, S-6, S-7, & S-8) were collected from the concrete slab of the drum storage area located in the Bauxite Storage Building. Three "background" wipe tests (S-1, S-2, & S-3) were collected from a concrete surface in the Alum Plant Settling Building.

The wipe test sampling kit was prepared in the laboratory by placing a two-inch by two-inch sterile gauze pad in a four ounce wide mouth glass container, five milliliters of deionized water was added to saturate the pad, the container was then capped with a teflon lined lid until ready to sample. An extra kit was prepared, identified as a trip blank and analyzed with the eight wipe test samples.

At each wipe test location a 100 cm2 area of the concrete surface was sampled. The specified area was defined by placing a pre-cleaned teflon template on the concrete slab. The saturated gauze pad was removed from the sealed container with gloved hands. The entire exposed concrete surface within the teflon template was sampled with the saturated pad using overlapping vertical wipe strokes, the area was then sampled with overlapping horizontal strokes (i.e. second wipe coverage oriented 90 degree to initial coverage). The pad was returned to the labeled glass container and sealed with the teflon lined lid. The vinyl gloves were discarded after each sample. The teflon template was wiped clean with a wet towel and rinsed with DI water between samples.

SL SAVANNAH L/ ORATORIES
& ENVIRONMENTAL SERVICES, INC.

900 Lakeside Drive • Mobile, Alabama 36609 • (205) 666-6633 • Fax (205) 666-6696

The sample locations for the wipe tests in the drum storage area were determined from the schematic of the previous sample locations (10/17/89). The background samples were located on a clean concrete slab in the Alum Plant settling building (see drawing with table of sample coordinates).

The order of sampling alternated back and forth from the drum storage area to the background slab until all eight samples were collected (time of each sample is given in the table with location coordinates).

The soils were sampled to a 6 inch depth utilizing a stainless steel hand auger. Prior to sampling, the top 2-3 inches of soil was removed with an aluminum scoop and discarded. A background soil sample (S-10) was located adjacent to the background slab east of the Alum Plant Building. The soil sample underlying the drum storage slab (S-9) was obtained from the "hole in pad" located at the north end of the slab.

At the time of sampling the wind direction was from the northeast, whereas the formaldehyde discharge is northwest of the drum storage area. There was no formaldehyde odor detected during sampling. It was noted by Mr. Tom Hankins of American Cyanamid that the wind was out of the NW at 1500 hrs. the previous afternoon (12-18-90), following the cleaning of the drum storage slab that morning.

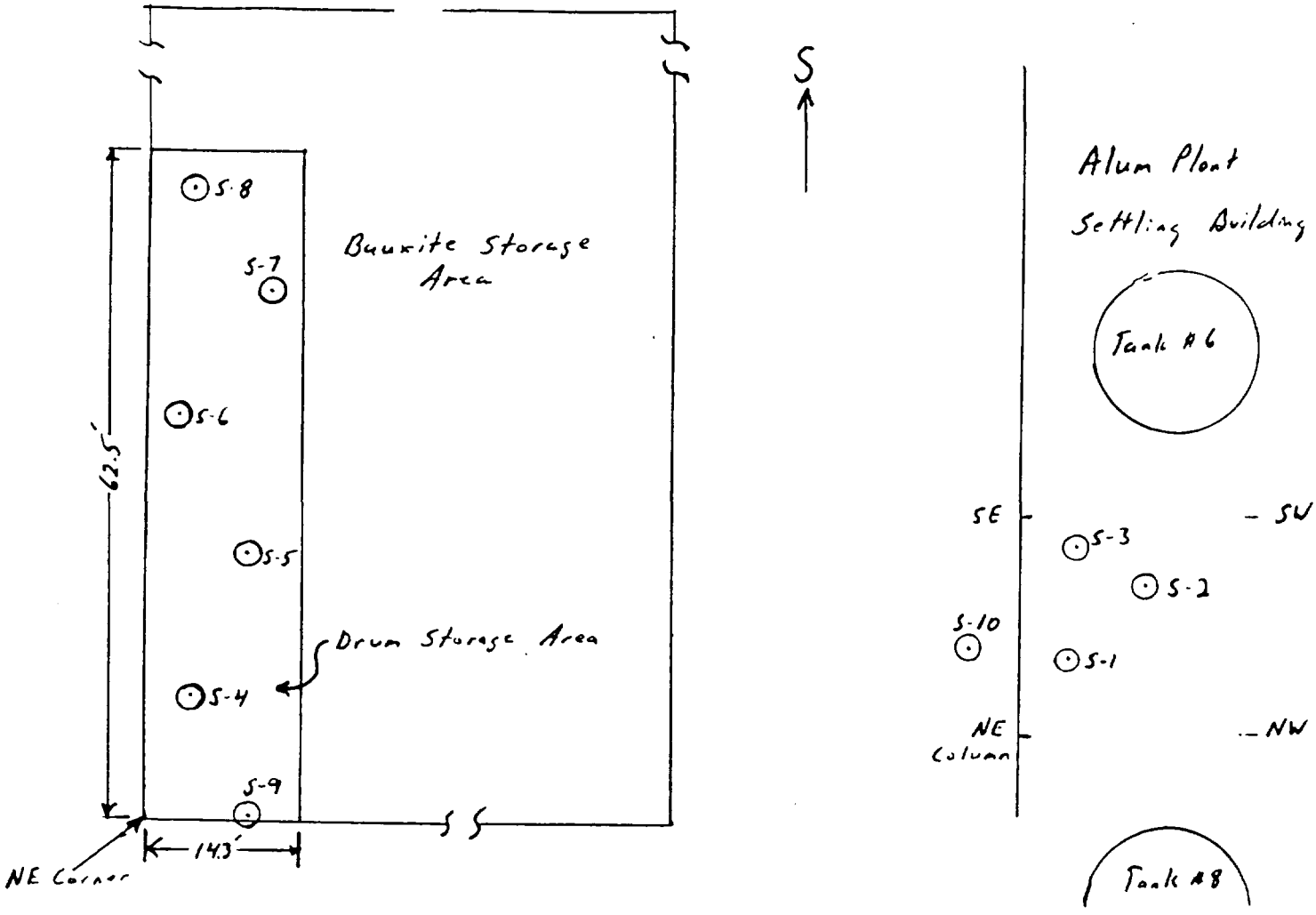
If you have any questions concerning sample collection, call me.

Sincerely,

Michael Nance

Michael Nance

MN:rs



Drum Storage Area				Background - Alum Plant	
Time	Sample Type	Sample I.D.	Coordinates from NE Corner (ft)	Sample I.D.	Coordinates from NE Column (ft)
1507	Wipe	S-4	12's, 4'w		
1510	Wipe			S-1	7's, 4'w
1512	Wipe	S-5	25's, 9'w		
1515	Wipe			S-2	13's, 11'w
1518	Wipe	S-6	38's, 2'w		
1520	Wipe			S-3	17's, 5'w
1523	Wipe	S-7	49's, 11'w		
1526	Wipe	S-8	59's, 4'w		
1544	Soil			S-10	8's, 5'e
1553	Soil	S-9	0 s, 9.5w "Hole in Pad"		

SL SAVANNAH L. ORATORIES
& ENVIRONMENTAL SERVICES, INC.

900 Lakeside Drive • Mobile, Alabama 36609 • (205) 666-6633 • Fax (205) 666-6696

LOG NO: M0-15145

Received: 19 DEC 90

Mr. Emery E. Baya, P.E.
Thompson Engineering Testing, Inc.
P.O. Drawer 9637
Mobile, Alabama 36691

Project: American Cyanamid/A89-083

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	SAMPLED BY
15145-1	S-1 Wipe Test 12/19/90 (Background)	Savannah Laboratories
15145-2	S-2 Wipe Test 12/19/90 (Background)	
15145-3	S-3 Wipe Test 12/19/90 (Background)	
15145-4	S-4 Wipe Test 12/19/90 (Drum Storage Area)	
15145-5	S-5 Wipe Test 12/19/90 (Drum Storage Area)	

PARAMETER	15145-1	15145-2	15145-3	15145-4	15145-5
Formaldehyde (A131), ug/100cm2	<5.0	<5.0	<5.0	<5.0	<5.0

REFERENCE: EPA SW-846 3rd Edition, 1986
Formaldehyde by HPLC

SL SAVANNAH L ORATORIES
& ENVIRONMENTAL SERVICES, INC.

900 Lakeside Drive • Mobile, Alabama 36609 • (205) 666-6633 • Fax (205) 666-6696

LOG NO: M0-15145

Received: 19 DEC 90

Mr. Emery E. Baya, P.E.
Thompson Engineering Testing, Inc.
P.O. Drawer 9637
Mobile, Alabama 36691

Project: American Cyanamid/A89-083

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	SAMPLED BY
15145-6	S-6 Wipe Test 12/19/90 (Drum Storage Area)	Savannah Laboratories
15145-7	S-7 Wipe Test 12/19/90 (Drum Storage Area)	
15145-8	S-8 Wipe Test 12/19/90 (Drum Storage Area)	
15145-9	Trip Blank 12/19/90	

PARAMETER	15145-6	15145-7	15145-8	15145-9
Formaldehyde (A131), ug/100cm2	<5.0	<5.0	<5.0	<5.0

REFERENCE: EPA SW-846 3rd Edition, 1986
Formaldehyde by HPLC

SL SAVANNAH L. ORATORIES
& ENVIRONMENTAL SERVICES, INC.

900 Lakeside Drive • Mobile, Alabama 36609 • (205) 666-6633 • Fax (205) 666-6696

LOG NO: M0-15145

Received: 19 DEC 90

Mr. Emery E. Baya, P.E.
Thompson Engineering Testing, Inc.
P.O. Drawer 9637
Mobile, Alabama 36691

Project: American Cyanamid/A89-083

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	SAMPLED BY
15145-10	S-9 Soil Test 12/19/90	Savannah Laboratories
15145-11	S-10 Soil Test 12/19/90	

PARAMETER	15145-10	15145-11
Formaldehyde (A131), ug/kg dw	<200	<200

REFERENCE: SW-846 3rd Edition, 1986
Formaldehyde by HPLC

Jesse L. Smith

Jesse L. Smith

SL SAVANNAH LABORATORIES AND ENVIRONMENTAL SERVICES, INC.
ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Mobile Division
900 Lakeside Drive
Mobile, AL 36609
Phone: (205) 666-6633

JOB NO.:
P.O. NO.:
PROJECT NAME: AMC / A89-083
PAGE: OF:
SAMPLER(S) (SIGNATURE): J. Michael Munn
CLIENT NAME/ADDRESS: Thompson Engineering Testing, Inc.
PHONE:
CLIENT CONTACT: Mr. Emory Boyce 666-3443

DATE REPORT REQUESTED: STANDARD ☐ RUSH ☐

SAMPLING DATE	SAMPLING TIME	SAMPLE ID	Composite	Grab	NUMBER OF CONTAINERS	AQUEOUS: Liter Glass Clear	Liter Amber Glass	120ml Amber Glass	40ml Voc Vial	20ml Scintill..	½ Gallon Plas Jug	Liter Plas Jug	500ml Plastic	250ml Plastic		NON-AQUEOUS: Liter w/m Glass	Liter w/m Plastic	500ml w/m Plastic	500ml w/m Glass	120ml Amber Glass	4 oz w/m Glass w/lid	analysis
12-19-90	1510	S-1 Wipe Test		✓	1																1	Formaldehyde
12-19-90	1515	S-2 Wipe Test		✓	1																1	
12-19-90	1520	S-3 Wipe Test		✓	1																1	
12-19-90	1507	S-4 Wipe Test		✓	1																1	
12-19-90	1512	S-5 Wipe Test		✓	1																1	
12-19-90	1518	S-6 Wipe Test		✓	1																1	
12-19-90	1523	S-7 Wipe Test		✓	1																1	
12-19-90	1526	S-8 Wipe Test		✓	1																1	
12-19-90	1553	S-9 Soil Test	✓		2			2														
12-19-90	1544	S-10 Soil Test	✓		2			2														

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
J. Michael Munn	12-19-90	1630						
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE/TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SL LOG NO.	LABORATORY REMARKS:
K. Wilson Morgan	12/19/90 1700	YES NO		15145	

Reference 5

FIELD OPERATIONS DIVISION
TELEPHONE CONVERSATION RECORD

Date:	6/30/95
Time:	11:05
ADEM REP.	Chris Smith
Conversation with:	Tom Hankins
Regarding:	American Cyanamide
Facility:	American Cyanamide

Summary:

I called Mr. Hankins to ask about the Hazardous Waste Drum Storage area, spills and on site disposal. Mr. Hankins said, when the drum storage area was used it had a concrete curb containment and a roof. Mr. Hankins also said there have been some spills on site, most of which were oil; however, in 1990 they had an Aluminum sulfate spill in Hog Bayou. All spills have been documented and remediated. They have 103 workers on site. Throughout the years hazardous waste has been disposed off site. The two surface impoundments are used for water recovering and recycling. Water is pumped into the impoundment. When full the next impoundment is used. Water is recovered and the impoundment is dredged. Sludge then is landfilled.

ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

Jim Folsom
Governor

Mailing Address:
PO BOX 301463
MONTGOMERY AL
36130-1463

Physical Address:
1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36109-2608

(205) 271-7700
FAX 271-7950
270-5612

Field Offices:

110 Vulcan Road
Birmingham, AL
[illegible]209-4702
5) 942-6168
FAX 941-1603

400 Well Street
P.O. Box 953
Decatur, AL
35602-0953
(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
36615-1131
(205) 450-3400
FAX 479-2593

November 24, 1993

MEMORANDUM

TO: John Chitwood, Chief
Compliance Branch

FROM: E. Mohamed Sylla, Geologist
Hydrogeology Unit

RE: CERCLA Site Investigation Prioritization
Hickory Street Landfill, Mobile County, Alabama
EPA I.D. No. ALD980842637

SUMMARY

On November 10, 1993, a site investigation prioritization (sip) was initiated for the Hickory Street Landfill in Mobile County, Alabama, at the request of ADEM Field Operations Division. The investigation included a background and literature review, and a site evaluation. An inventory of wells was conducted and none were found within a four mile radius. A public water well owned by the Saraland Water Service is the closest well and is located about 6 miles north of the site.

The landfill monitoring well system consists of four wells. Monitoring wells 2, 3, and 4 are located downgradient of the landfill in very close proximity to a saturated marsh area. Monitoring well MW 1 is an upgradient well considering its depth and location. None of the MWs was properly maintained. Review of the monitoring well data indicates contamination of groundwater has occured.

A small area of the landfill is not vegetated and revealed an eroded surface. Waste was not exposed in this area.

LOCATION

The Hickory Street landfill site is located in Township 4 South, Range 1 East (Figure 1) and occupies approximately 60 acres. The site coordinates are 30 degrees 42' 30" N latitude and 88 degrees 03' 00" W longitude. The site can be accessed from the north end of Hickory Street, Mobile, Alabama.

SURFACE WATER AND TOPOGRAPHY

The Hickory Street Landfill borders Onemile Creek on its eastern boundary while it is bordered on the west by saturated marsh area and bordered by a poor residential area to the south (Figure 2).

Printed on Recycled Paper

Threemile Creek, located west of the site, flows in a north easterly direction for about 3/4 mile and discharges into the Mobile River, which discharges into Mobile Bay. The north and west sides of the landfill extend into flood prone and saturated wetland areas. Onemile Creek converges with Threemile Creek approximately 150 feet north of the landfill.

The site is drained by Onemile and Threemile Creeks. The most important source of water for the city of Mobile is an impoundment on Big Creek. Mobile River is one of the principal sources of surface water and is the largest source of industrial water supplies in the city of Mobile according to Reed and McCain, (1972).

Topographically, the area investigated is in the Alluvial Deltaic Plain District of the East Gulf Coastal Plain physiographic section (Saap and Emplaincourt, 1975). The land surface ranges in altitude from 100 feet to sea level. The Hickory Street Landfill area is characterized by low lying, swampy terrain and brackish water (Mooty, 1988). The landfill is reported to have a total thickness of 50 ft with its base at about 10-12 feet below the refilled swamp surface (Smitherman, 1985). Sinkholes and other karst features are not characteristic of this area.

SOILS

The Soil Survey for Mobile County, Alabama, indicates that, the Hickory Street Landfill is underlain by Dorovan-Levy association which have slopes ranging from 0 to 1%. These soils at the landfill are very poorly drained in depressional swamps. Typically, the surface layer of Dorovan soils is very dark grayish-brown muck while the subsoil is black muck and is very slowly permeable. Levy soils, typically have gray silty clay loam surface layer while the subsoil is gray clay that has mottles of yellow and brown. Estimated permeabilities of these soils range from 1X10-4 to 1X10-8 cm/sec. (Unified Soil Classification, 1963).

In 1983, the City of Mobile Public Works Department installed 4 Monitoring Wells within the property limit of the Hickory Street Landfill (Figure 2). Groundwater elevations were submitted by applicant as follows:

MW	Location	Depth to water level bls	Total depth of well bls	Water level above MSL
1	South of site between the front gate & the maintenance shop	25.00	37.5	1.55
2	West side & in bottom slope of landfill	7.67	21.0	1.89

3	north end of site approx. 25 ft away from the surrounding swampy area. 1mile & 3mile Creeks converge about 60 yards N of the well	5.00	21.5	1.01
4	East of the site & close to 1mile Creek	6.75	18.5	1.04

GEOLOGY

The Hickory Street Landfill is underlain by alluvial, terrace, coastal deposits, which are of the Pleistocene and Holocene Series and represent complex beach, dune, lagoonal, estuarine, and deltaic depositional environments. These sediments consist of very fine to coarse-grained sand that is sometimes gravelly which dips southward at less than 1 degree (15 to 25 feet per mile). Sandy clay is occasionally interbedded with the sand. The maximum thickness of the alluvial, terrace, and coastal deposits was estimated by Chandler, (1983), as ranging from 0 to 200 feet, based on the first appearance of coarse siliclastic sediments.

The landfill site has no history of sinkhole development. Sinkholes and other Karst features are not characteristic of this area. No sinkholes were observed within the the 4 miles radius of the site and are not documented in the available literature.

HYDROGEOLOGY

The major aquifer within the area of inspection is the Alluvial-Coastal aquifer which is hydraulically connected to the underlying Pilocene-Miocene aquifer. These aquifers are not heavly used. There was not a single water well found within a 4 miles radius of the site. Aquifer recharge is dominated by rainfall which averages 62 in/yr (National Oceanic and Atmospheric Administration, 1985).

In the area of the site, the upper saturated zone which is a marsh area is located at the base of the landfill. The landfill is located in the recharge area of the Alluvial-Coastal aquifer which is considered to be susceptible to contamination from the land surface (Mooty, 1988). The site is underlain by the Alluvial-Coastal aquifer which generally is an area of groundwater discharge; this decreases the likelihood of a contaminant migrating into the deep groundwater system, if the water levels do not decline.

Aquifer yield potential ranges from 0.5 to 1.0 mgal/d and higher yield wells are completed in beds of sand and gravel that is originated from coastal deposits and buried channels.

There are 4 monitoring wells (MW) located within the property limit of the Hickory Street Landfill. Monitoring well 1, an upgradient well, was in good condition, and had a unlocked padlock. Downgradient monitoring wells 2, 3, and 4 have rusted, unpadlocked lids. These 3 monitoring wells are at a very close proximity to the swamp area.

The groundwater direction of flow is expected to be east-west and the regional potentiometric surfaces for the Alluvial-Coastal aquifer is between 50 and 100 feet (Modified from Ricco et al, 1973). Wells developed in this aquifer generally tap deep sands with potentiometric heads above sea level (Mooty, 1988).

GROUNDWATER USAGE

A water well inventory was conducted during the site visit. Public water is available throughout the 4 miles radius of the site within which no private or public water well was identified.

The closest public supply well is approximately 6 miles north of the site, which is the suspected upgradient direction. This well #27 is 148 feet deep at 19 feet altitude of land surface and is owned by Saraland Water Service (Mooty, 1988).

WATER QUALITY

Groundwater in the area of the Hickory Street landfill site is generally not suitable for domestic uses. Sampling of the monitoring well system at the Hickory Street Landfill began in 1981 to determine the water quality. The biannual ADEM groundwater monitoring report of the landfill was submitted by Envirochem, Inc., in Mobile revealed that, the Maximum Contaminant Levels (MCL) of volatiles, lead, specific conductance, chloride, iron and manganese have been exceeded. Analytical data indicates that, the increase in concentration of parameters varies between wells and between sampling events. A report completed in detail on groundwater quality is attached (See tables).

GROUNDWATER ROUTE CHARACTERISTICS:

Principal Aquifer: Alluvial-Coastal Aquifer

Gross Precipitation: 62 inches per year

Net Precipitation: 12 inches per year

Depth to Aquifer of concern: 0-24 inches

Slope: 0 to 1 percent

Groundwater Flow Direction: Assumed to be to the east-west

Permeability of unsaturated zone: 1X10-4 cm/sec

TARGETS

Groundwater use: Domestic

Distance of nearest well: approximately 6 miles north to the site.

The Pliocene-Miocene and the Alluvial-Coastal aquifers are hydraulically interconnected.

REFERENCES

Hickman, Glenn L., and Charles Owens, 1980, Soil Survey of Mobile County, Alabama, U.S. Department of Agriculture, Soil Conservation Service, Page 76.

Hicks, R.E., 1992, Hydrologic Evaluation of Hickory Street Landfill Permit no. ILF 49-01, Mobile County, Alabama.

Mooty, Will S., 1988, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 13, Page 12.

Reed, P.C., 1971, Geology of Mobile County, Alabama, Page 8.

Reed, P.C. and J.F. McCain, 1972, Water availability in M.C., Alabama Geology Survey of Alabama, University of Alabama, Page 12.

Smitherman, W.G., 1985, TDD no. F4-8412-05, Contract no. 68-01-6699, NUS Corporation, Superfund Division, U.S. EPA.

Unified Soil Classification, 1963

cc: Jennifer Klepac
Fred C. Mason

PWS ID1:	AL
PWS ID2:	0001005
PWS TYPE:	C
ACTIVITY FLAG:	A
SYSTEM BEGIN-YY:	75
SYSTEM BEGIN-MM:	06
DEACT-YY:	00
DEACT-MM:	00
POP SERVED:	279,000
PCT SURFACE:	100
PCT GROUND:	000
PCT PUR SURFACE:	000
PCT PUR GROUND:	000
SYSTEM NAME:	MOBILE WATER SERVICE SYSTEM
ADDRLINE1:	ATTN: JAMES FIBBE, DIRECTOR
ADDRLINE2:	P O BOX 2368
CITY:	MOBILE
STATE:	AL
ZIP:	36652
ZIP2:	
PHONE AREA CODE:	205
PHONE EXT 1:	694
PHONE EXT 2:	3146
EMERGENCY AREA CODE:	205
EMERGENCY EXT 1:	694
EMERGENCY EXT 2:	3100
SERVICE CONNECTIONS:	93,000
SEASON BEGIN-MM:	00
SEASON BEGIN-DD:	00
SEASON END-MM:	00
SEASON END-DD:	00
OWNER TYPE:	4
REGULATING ENTITY:	S
USERID:	BAL
DATESTAMP:	04/07/94
TIMESTAMP:	08:29:10.31
CROSS CONNECT:	Y
SAMPLING PLAN:	Y
AC PIPE:	
REQUIRED COMPLIANCE SAMPLES:	0150
REQUIRED RAW SAMPLES:	0000
LAB ID:	30040
LAB NAME:	Mobile Water Service Laboratory
TURBIDITY MONITORING REQUIRED:	Y
FLOURIDE MONITORING REQUIRED:	Y

Reference 7

PWS SUMMARY

PWS ID1:	AL
PWS ID2:	0001015
PWS TYPE:	C
ACTIVITY FLAG:	A
SYSTEM BEGIN-YY:	75
SYSTEM BEGIN-MM:	06
DEACT-YY:	00
DEACT-MM:	00
POP SERVED:	42,000
PCT SURFACE:	100
PCT GROUND:	000
PCT PUR SURFACE:	000
PCT PUR GROUND:	000
SYSTEM NAME:	PRICHARD WATER WORKS BOARD
ADDRLINE1:	ATTN: ROGER HICKS,SUPERINTENDENT
ADDRLINE2:	P O BOX 10455
CITY:	PRICHARD
STATE:	AL
ZIP:	36610
ZIP2:	
PHONE AREA CODE:	205
PHONE EXT 1:	457
PHONE EXT 2:	3396
EMERGENCY AREA CODE:	205
EMERGENCY EXT 1:	457
EMERGENCY EXT 2:	3459
SERVICE CONNECTIONS:	14,000
SEASON BEGIN-MM:	00
SEASON BEGIN-DD:	00
SEASON END-MM:	00
SEASON END-DD:	00
OWNER TYPE:	4
REGULATING ENTITY:	S
USERID:	TJJ
DATESTAMP:	12/30/93
TIMESTAMP:	14:59:19.10
CROSS CONNECT:	Y
SAMPLING PLAN:	Y
AC PIPE:	
REQUIRED COMPLIANCE SAMPLES:	0050
REQUIRED RAW SAMPLES:	0000
LAB ID:	30190
LAB NAME:	Prichard Water Works Laboratory
TURBIDITY MONITORING REQUIRED:	Y
FLOURIDE MONITORING REQUIRED:	Y

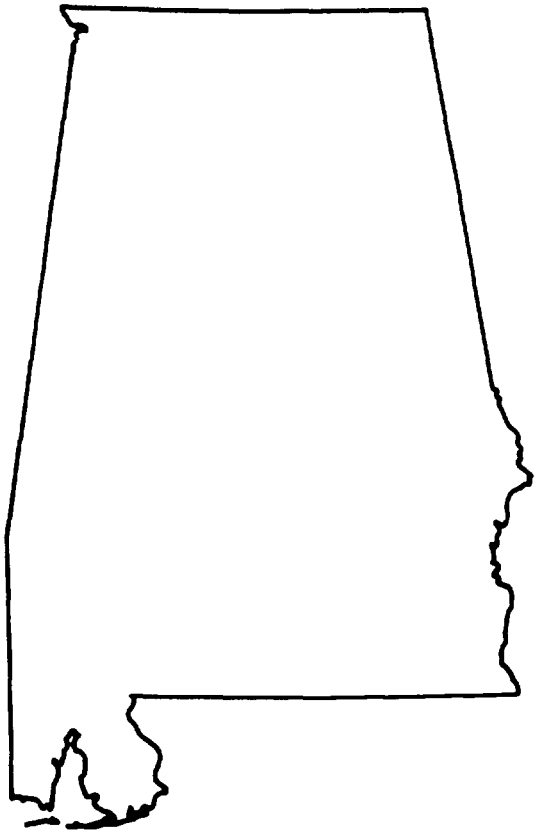
PWS ID1:	AL
PWS ID2:	0001021
PWS TYPE:	C
ACTIVITY FLAG:	A
SYSTEM BEGIN-YY:	75
SYSTEM BEGIN-MM:	06
DEACT-YY:	00
DEACT-MM:	00
POP SERVED:	11,940
PCT SURFACE:	000
PCT GROUND:	100
PCT PUR SURFACE:	000
PCT PUR GROUND:	000
SYSTEM NAME:	SARALAND WATER SERVICE
ADDRLINE1:	ATTN: JAMES HOVEY, SUPERINTENDENT
ADDRLINE2:	P. O. BOX 837
CITY:	SARALAND
STATE:	AL
ZIP:	36571
ZIP2:	
PHONE AREA CODE:	205
PHONE EXT 1:	675
PHONE EXT 2:	5126
EMERGENCY AREA CODE:	205
EMERGENCY EXT 1:	679
EMERGENCY EXT 2:	5508
SERVICE CONNECTIONS:	3,920
SEASON BEGIN-MM:	00
SEASON BEGIN-DD:	00
SEASON END-MM:	00
SEASON END-DD:	00
OWNER TYPE:	4
REGULATING ENTITY:	S
USERID:	TSD
DATESTAMP:	07/11/94
TIMESTAMP:	12:28:19.07
CROSS CONNECT:	Y
SAMPLING PLAN:	Y
AC PIPE:	Y
REQUIRED COMPLIANCE SAMPLES:	0010
REQUIRED RAW SAMPLES:	0001
LAB ID:	10060
LAB NAME:	Mobile Branch Laboratory
TURBIDITY MONITORING REQUIRED:	N
FLOURIDE MONITORING REQUIRED:	Y

OVERSIZED

DOCUMENT

Reference 9

Water Resources Data Alabama Water Year 1990

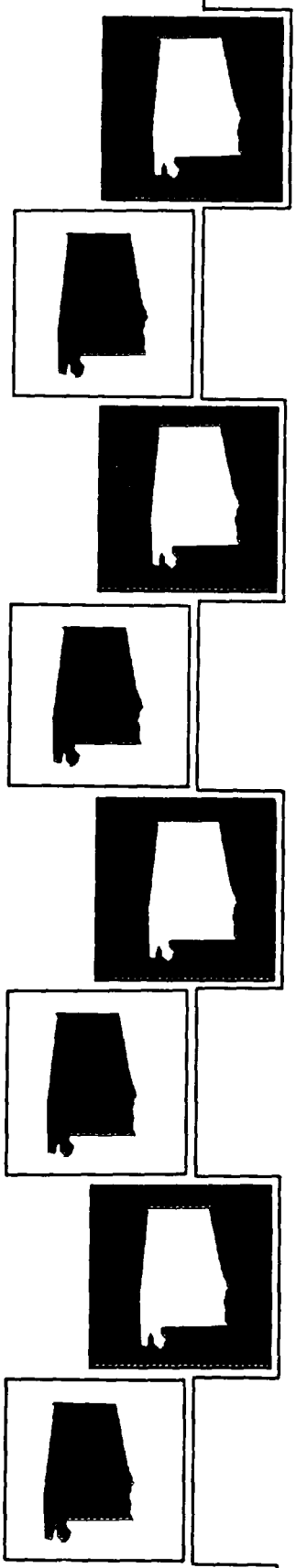


U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AL-90-1

Prepared in cooperation with the Alabama Department of Environmental Management, the Alabama Highway Department, and with other State, municipal, and Federal agencies

Reference 10

Water-Resources Investigations Report 93-4186



LOW-FLOW AND FLOW-DURATION CHARACTERISTICS OF ALABAMA STREAMS

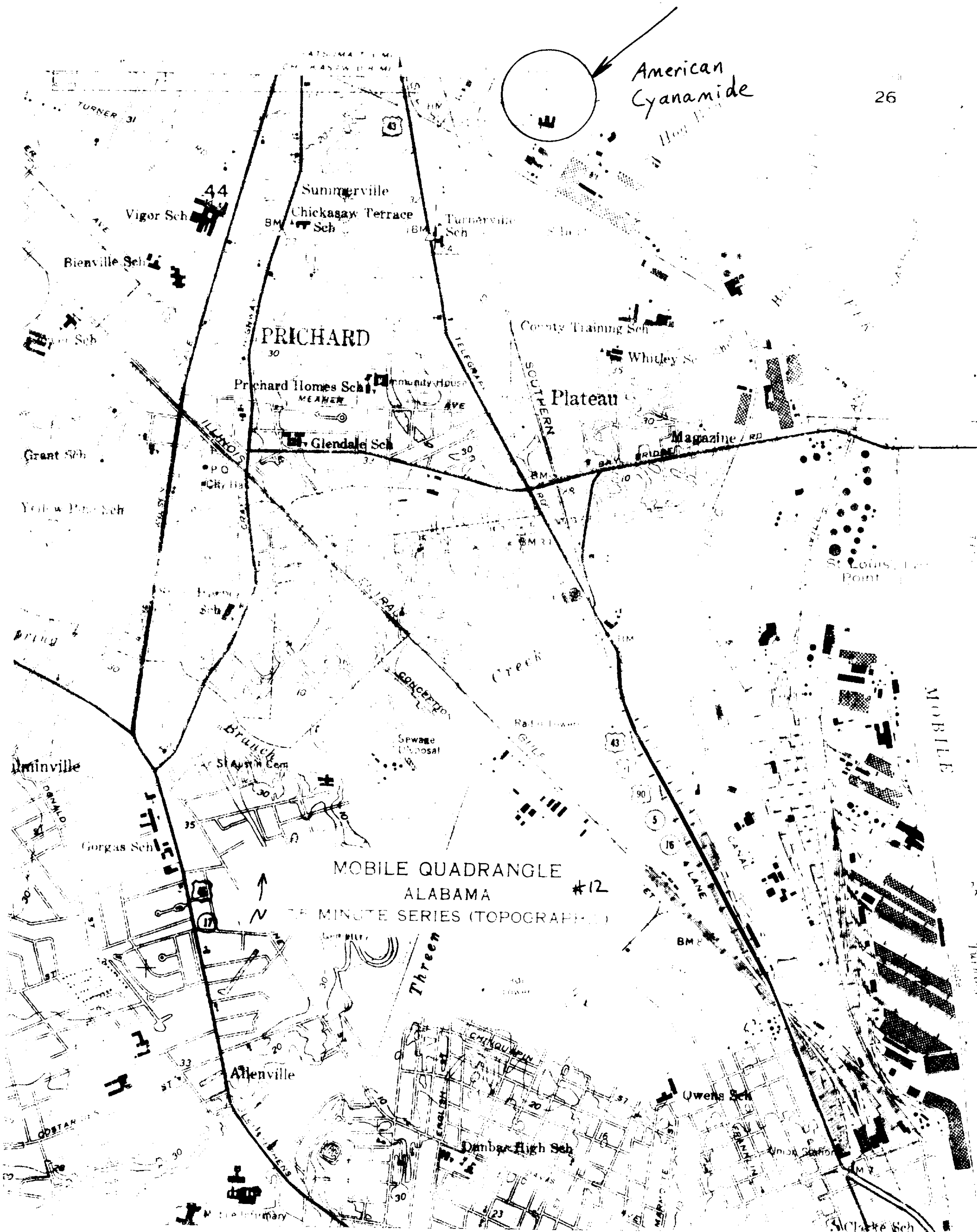
Prepared by
the United States Department of the Interior, Geological Survey
In cooperation with
the Alabama Department of Environmental Management
and the Tennessee Valley Authority

Reference 11

Federally Listed Aquatic Species in the State of Alabama November 1993

Species	Common Name	Stat	Hydro-Unit Sub-basin	CH Hydro Unit	River/ Stream	County
Pseudemys alabamensis	Alabama red-bellied turtle	E	03160204-010,020,030,040 060		Mobile-Tensas Delta	Baldwin, Mobile
			03160205-050		Fish River	Baldwin
			03150204-110,120,130		Little River (from State park downstream)	Baldwin, Escambia, Monroe
			03150204-120,130		Alabama River (Little River confluence downstream)	Clarke
Sternotherus depressus	Flattened musk turtle	T	03160112-010,030,040		Valley Creek (Birmingham City limits downstream)	Jefferson
			03160112-010,030,040		Mud Creek (town of Mud Creek, downstream)	Jefferson
			03160112-010,040,060		Black Warrior River (mainstem for Mulberry and Locust Fork confluence, downstream to Bankhead Dam)	Jefferson, Walker, Tuscaloosa
			03160112-040		Shoal Creek (lowermost 5 miles)	Jefferson
			03160112-040		Little Shoal Creek	Jefferson, Tuscaloosa
			03160112-050,060		Big Yellow Creek (lowermost 10 miles)	Blount, Cullman, Walker

Species	Common Name	Stat	Hydro-Unit Sub-Basin	CH Hyrdo Unit	River/ Stream	County
Sternotherus depressus	Flattened musk turtle	T	03160111-060,080		Calvert Prong of Little Warrior River (Al Hwy 75 dowsntream)	Blount
			03160111-070		Blackburn Fork of Little Warrior River (Inland Lake Dam downstream)	Blount
			03160111-080		Gurley Crk (Al Hwy 75 downstream)	Blount, Jefferson
			03160111-010		Turkey Crk (Cunningham Crk confluence downstream)	Jefferson
			03160111-130		Cane Crk(Fivemile Crk. confluence downstream)	Jefferson
			03160111-120,130		Fivemile Crk (Brookside downstream)	Jefferson
			03160111-140		Village Crk (Bayview Lake Dam downstream)	Jefferson
Acipenser oxryhncus desotoi	Gulf sturgeon	T	03160204-130,160		Alabama River (Claiborne Dam downstream to confluence with Mobile River)	Clarke, Monroe
			03160204-010,020,030,040, 050,060		Mobile River (main stem from confluence with Tombigbee River downstream)	Mobile, Baldwin


American Cyanamide
MOBILE QUADRANGLE
ALABAMA
#12
N
PRICHARD
Summerville
Chickasaw Terrace Sch
Turnerville Sch
Vigor Sch
Bienville Sch
County Training Sch
Whitley Sch
Prichard Homes Sch
Plateau
Magazine
Glendale Sch
Grant Sch
Yellow Pine Sch
Creek
Branch
Sewage Disposal
St Austin Cem
Gorgas Sch
Three
Allenville
Owens Sch
Dunbar High Sch
Union Station
MOBILE
St Louis Point
Chinquepin

Not listed

EPA

POTENTIAL HAZARDOUS WASTE SITE
FINAL STRATEGY DETERMINATION

REGION	SITE NUMBER
IV	AL0000015 70

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency, Site Tracking System, Hazardous Waste Enforcement Task Force (*EN-335*), 401 M St., SW, Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
American Cyanamid		
C. CITY: Mobile	D. STATE: Alabama	E. ZIP CODE

II. FINAL DETERMINATION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED	X		X		
B. REMEDIAL ACTION NEEDED, BUT NO RESOURCES AVAILABLE *(If yes, complete Section III.)*					
C. REMEDIAL ACTION *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR FINAL STRATEGY DETERMINATION

Site Investigation and nature of material showed no problems @ site.

F. IF A CASE DEVELOPMENT PLAN HAS BEEN PREPARED, SPECIFY THE DATE PREPARED *(mo., day, & yr.)*	G. IF AN ENFORCEMENT CASE HAS BEEN FILED, SPECIFY THE DATE FILED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
B. E. Cofp.	205/832-6728	9/23/81

III. REMEDIAL ACTIONS TO BE TAKEN WHEN RESOURCES BECOME AVAILABLE

List all remedial actions, such as excavation, removal, etc. to be taken as soon as resources become available. See instructions for a list of Key Words for each of the actions to be used in the spaces below. Provide an estimate of the approximate cost of the remedy.

A. REMEDIAL ACTION	B. ESTIMATED COST	C. REMARKS
	$	
	$	
	$	
	$	
	$	
	$	
	$	
	$	
D. TOTAL ESTIMATED COST	$	

Continue On Reverse

POTENTIAL HAZARDOUS WASTE SITE LOG

SITE NUMBER: 86

NOTE: The initial identification of a potential site or incident should not be interpreted as a finding of illegal activity or confirmation that an actual health or environmental threat exists. All identified sites will be assessed under the EPA's Hazardous Waste Site Enforcement and Response System to determine if a hazardous waste problem actually exists. EPA. I.D. (illegible)

SITE NAME: American Cyanamide Company

CITY: Mobile | STATE: Ala. | ZIP CODE: 36614

SUMMARY OF POTENTIAL OR KNOWN PROBLEM
- Alum mud impoundment
- Holding Basin for Organic Effluent

ITEM	DATE OF DETERMINATION OR COMPLETION	RESPONSIBLE ORGANIZATION OR INDIVIDUAL (EPA, State, Contractor, Other)	PERSON MAKING ENTRY TO LOG FORM	DATE ENTERED ON LOG (mo,day,yr)
1. IDENTIFICATION OF POTENTIAL PROBLEM	11/D-79		Javier A. Colón	2/4/80
2. PRELIMINARY ASSESSMENT	1/28/80		Javier A. Colón	2/4/80
APPARENT SERIOUSNESS OF PROBLEM	☐ HIGH ☐ MEDIUM ☒ LOW ☐ NONE ☐ UNKNOWN			
3. SITE INSPECTION	1/28/80		J. A C	3/19/80
4. EPA TENTATIVE DISPOSITION (check appropriate item(s) below)				
☐ a. NO ACTION NEEDED				
☐ b. INVESTIGATIVE ACTION NEEDED				
☐ c. REMEDIAL ACTION NEEDED				
☐ d. ENFORCEMENT ACTION NEEDED				
5. EPA FINAL STRATEGY DETERMINATION (check appropriate item(s) below)				
☐ a. NO ACTION NEEDED				
☐ b. REMEDIAL ACTION NEEDED				
☐ c. REMEDIAL ACTION NEEDED BUT, NO RESOURCES AVAILABLE				
☐ d. ENFORCEMENT ACTION NEEDED				
☐ (1) CASE DEVELOPMENT PLAN PREPARED				
☐ (2) ENFORCEMENT CASE FILED OR ADMINISTRATIVE ORDER ISSUED				
6. STRATEGY COMPLETED				

EPA Form T2070-1 (10-79)

American Cyanamide, Mobile Co

POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

EPA

REGION: IV

SITE NUMBER (to be assigned by HQ): 86

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II *(Preliminary Assessment)*. File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: American Cyanamide Company

B. STREET *(or other identifier)*: Cyanamide road

C. CITY: Mobile

D. STATE: AL.

E. ZIP CODE: 36614

F. COUNTY NAME: Mobile

G. OWNER/OPERATOR *(If known)*

1. NAME: American Cyanamide

2. TELEPHONE NUMBER: (205) 457-6601

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4 MUNICIPAL ☒ 5 PRIVATE ☐ 6 UNKNOWN

Corporation

I. SITE DESCRIPTION

1- Alum muds impoundment

2- Holding basin for organic affluent

3- mo. Brunson landfill

J. HOW IDENTIFIED *(i.e., citizen's complaints, OSHA citations, etc.)*: The company provided information during the Eckhardt Report

K. DATE IDENTIFIED *(mo., day, & yr.)*: mid-1979

L. PRINCIPAL STATE CONTACT

1. NAME: Dan Cooper

2. TELEPHONE NUMBER: (205) 832-6728

II. PRELIMINARY ASSESSMENT *(complete this section last)*

A. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☐ 4 NONE ☒ 5 UNKNOWN

B. RECOMMENDATION

☐ 1. NO ACTION NEEDED *(no hazard)*

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR: _____
b. WILL BE PERFORMED BY: _____

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR: _____
b. WILL BE PERFORMED BY: _____

☐ 4. SITE INSPECTION NEEDED *(low priority)*

C. PREPARER INFORMATION

1. NAME: Javier A. Colón

2. TELEPHONE NUMBER: (205) 832-6728

3. DATE *(mo., day, & yr.)*: JAN. 28/80

III. SITE INFORMATION

A. SITE STATUS

☒ 1 ACTIVE *(Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)*

☐ 2. INACTIVE *(Those sites which no longer receive wastes.)*

☐ 3. OTHER *(specify)*: _____ *(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)*

B. IS GENERATOR ON SITE?

☐ 1. NO ☒ 2. YES *(specify generator's four-digit SIC Code)*: 2819, 2821, 2899

C. AREA OF SITE *(in acres)*

1- 7 ACRES on Company Property

2- ≈ 30 ACRES Brunson Land Fill

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE *(deg.-min.-sec.)*

2. LONGITUDE *(deg.-min.-sec.)*

E. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO ☐ 2. YES *(specify)*: _____

T2070-2 (10-79)

Continue On Reverse

Continued from front

IV. CHARACTERIZATION OF SITE ACTIV

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION	X	1. LANDFILL OUTSIDE
	2. SHIP	X	2. SURFACE IMPOUNDMENT(S)		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND	X	4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
X	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

A.5. Pipeline : ONSITE Transports Organic Discharge To P.O.T.W,

B.2. SURFACE IMPOUNDMENTS: #1 Holding Lagoon For Recovery of WATER ⇔ C.4 Recycling/Recovery of WATER equivalent ?.

, #2: For ALUM MUD

D.1. LANDFILL: OUTSIDE PROPERTY BOUNDARIES, OWNED and OPERATED by MR. BRANSON.

V. WASTE RELATED INFORMATION

A. WASTE TYPE

[ ] 1 UNKNOWN [ ] 2 LIQUID [X] 3. SOLID [X] 4 SLUDGE [ ] 5. GAS

B. WASTE CHARACTERISTICS

[X] 1 UNKNOWN [ ] 2. CORROSIVE [ ] 3. IGNITABLE [ ] 4 RADIOACTIVE [ ] 5 HIGHLY VOLATILE

[ ] 6 TOXIC [ ] 7 REACTIVE [ ] 8 INERT [ ] 9 FLAMMABLE

[ ] 10 OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Yes Laboratory Analysis and Records of the Amounts involved

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present. 1,000 Hlvy

X	a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
	AMOUNT 9	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
	UNIT OF MEASURE TON	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE TONS	UNIT OF MEASURE
	(1) PAINT, PIGMENTS	(1) OILY WASTES	(1) HALOGENATED SOLVENTS	(1) ACIDS	(1) FLYASH	(1) LABORATORY PHARMACEUT.
	(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
	(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
	(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
X	(5) OTHER (specify):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify):
	Organic Residue = Paraffins 40% Rosins 40% Surface soils 20%			(6) CYANIDE	X (6) OTHER (specify): ALUM Sludge Al_2O_3 Silica Fe_2O_3 Ti_2O_3	
				(7) PHENOLS		
				(8) HALOGENS		
				(9) PCB		
				(10) METALS		
				(11) OTHER (specify)		

Continued From Page 2

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE *(place in descending order of hazard).*

might require to run extraction procedure for [illegible] [illegible] such as Chromium.

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

During Period 1937-1977 a Discharge existed to the River, and the Principal Types of WASTES (Alum Mud and Organic Residues) had a greater WATER content. In 9/1/77 They eliminated the Discharge, connecting to a P.O.T.W. AND Delivered MORE manageable WASTE TO LANDFILL.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
9. 6. CONTAMINATION OF FOOD CHAIN				
9. 7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (specify):				

Continued From Front

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

☒ 1. NPDES PERMIT ☐ 2. SPCC PLAN ☒ 3. STATE PERMIT (specify): AWIC
☒ 4. AIR PERMIT ⇔ ☒ 5. LOCAL PERMIT ☐ 6. RCRA TRANSPORTER
☐ 7. RCRA STORER ☐ 8. RCRA TREATER ☐ 9. RCRA DISPOSER
☐ 10. OTHER (specify): Note: the Mobile County Board of Health is in charge of Air Permits

B. IN COMPLIANCE?

☒ 1. YES ☐ 2. NO ☐ 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number):

VIII. PAST REGULATORY ACTIONS

☒ A. NONE ☐ B. YES (summarize below)

IX. INSPECTION ACTIVITY (past or on-going)

☐ A. NONE ☒ B. YES (complete items 1,2,3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
1- Inspection & Monitoring	1-31-79 2-1-80 2-2-80	AWIC STATE	Monitor organic waste stream leading To (P.O.T.W). No Recommendation were Done
2- Mobile County Board of Health, Inspection	7-18-79	Mobile County	Annual visual inspections. No Recommendations were Done

X. REMEDIAL ACTIVITY (past or on-going)

☒ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.

American Cyanamid

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION: IV | SITE NUMBER (to be assigned by Hq): 86

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (*Section II*). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Tack Force (*EN-335*); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: AMERICAN CYANAMID CO.

B. STREET (or other identifier): Cyanamide Road

C. CITY: Mobile

D. STATE: Ala.

E. ZIP CODE: 36614

F. COUNTY NAME: Mobile

G. SITE OPERATOR INFORMATION

1. NAME: AMERICAN Cyanamid

2. TELEPHONE NUMBER: (205) 457-6601

3. STREET: Cyanamid Road

4. CITY: Mobile

5. STATE: Ala.

6. ZIP CODE: 36614

H. REALTY OWNER INFORMATION (*If different from operator of site*)

1. NAME:

2. TELEPHONE NUMBER:

3. CITY:

4. STATE:

5. ZIP CODE:

I. SITE DESCRIPTION
1- Plum mud impoundment
2- holding BASIN for Organic AFFLUENT

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (*complete this section last*)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (*mo., day, & yr.*)

B. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME | 2. TELEPHONE NUMBER | 3. DATE (*mo., day, & yr.*)

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME | 2. TITLE

3. ORGANIZATION | 4. TELEPHONE NO. (*area code & no.*)

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.

C. SITE REPRESENTATIVES INTERVIEWED (*corporate officials, workers, residents*)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS

Continued From Front

d. INSPECTION INFORMATION (continued)

D. GENERATOR INFORMATION (sources of waste)

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
American Cyanamid	(205) 457-6601	Cyanamid Road / Mobile, AL 36614	Alum mud and Organic Residue

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
BRunson Industrial Waste Landfill	(205) 675-4187	Mr. W. D. BRunson, Pres., BRunson Construction Company
↳ located in the	SE ¼ SE ¼	35 STATION ST., SARALAND, ALA. 36571
		Section 24, T. 2 S., R. 2 W., Mobile County

G. DATE OF INSPECTION (mo., day, & yr.)	H. TIME OF INSPECTION	I. ACCESS GAINED BY: (credentials must be shown in all cases)
4/28/80	10 A.M.	☒ 1. PERMISSION ☐ 2. WARRANT

J. WEATHER (describe)

—

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER			
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
I. OTHER (specify)			

B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS ☐ a. GROUND ☐ b. AERIAL

2. PHOTOS IN CUSTODY OF:

D. SITE MAPPED?

☐ YES. SPECIFY LOCATION OF MAPS:

E. COORDINATES Sec. 44 C?, T.3S., R.1W. [illegible] County

1. LATITUDE (deg.-min.-sec.)

2. LONGITUDE (deg.-min.-sec.)

V. SITE INFORMATION

A. SITE STATUS

☒ 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

☐ 2. INACTIVE (Those sites which no longer receive wastes.)

☐ 3. OTHER (specify): (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

☐ 1. NO ☒ 2. YES (specify generator's four-digit SIC Code): 2819, 2821, 2899

C. AREA OF SITE (in acres)

7 Acres

D. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO ☒ 2. YES (specify): PLT. [illegible] 1,500 FT.

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
		X		X		X	
	1. RAIL		1. PILE		1. FILTRATION	X	1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

☐ 1. STORAGE ☐ 2. INCINERATION ☒ 3. LANDFILL ☒ 4. SURFACE IMPOUNDMENT ☐ 5. DEEP WELL

☐ 6. CHEM/BIO/PHYS TREATMENT ☐ 7. LANDFARM ☐ 8. OPEN DUMP ☐ 9. TRANSPORTER ☐ 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1. LIQUID ☒ 2. SOLID ☒ 3. SLUDGE ☐ 4. GAS

B. WASTE CHARACTERISTICS

☐ 1. CORROSIVE ☐ 2. IGNITABLE ☐ 3. RADIOACTIVE ☐ 4. HIGHLY VOLATILE

☐ 5. TOXIC ☐ 6. REACTIVE ☐ 7. INERT ☐ 8. FLAMMABLE

☐ 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Yes

II. WASTE RELATED INFORMATION (contin') 76000 Hundred Tons

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT 9.	AMOUNT	AMOUNT	AMOUNT	AMOUNT 5	AMOUNT
UNIT OF MEASURE Tons	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE Tons	UNIT OF MEASURE
[ ] (1) PAINT, PIGMENTS	[ ] (1) OILY WASTES	[ ] (1) HALOGENATED SOLVENTS	[ ] (1) ACIDS	[ ] (1) FLYASH	[ ] (1) LABORATORY, PHARMACEUT.
[ ] (2) METALS SLUDGES	[ ] (2) OTHER (specify):	[ ] (2) NON-HALOGNTD. SOLVENTS	[ ] (2) PICKLING LIQUORS	[ ] (2) ASBESTOS	[ ] (2) HOSPITAL
[ ] (3) POTW		[ ] (3) OTHER (specify):	[ ] (3) CAUSTICS	[ ] (3) MILLING/MINE TAILINGS	[ ] (3) RADIOACTIVE
[ ] (4) ALUMINUM SLUDGE			[ ] (4) PESTICIDES	[ ] (4) FERROUS SMELTING WASTES	[ ] (4) MUNICIPAL
[X] (5) OTHER (specify): Organic Residue Approximate Composition = Paraffins 48% + Rosins 40% + Surface Soils 20%			[ ] (5) DYES/INKS	[ ] (5) NON-FERROUS SMLTG. WASTES	[ ] (5) OTHER (specify):
			[ ] (6) CYANIDE	[X] (6) OTHER (specify): Alum sludge Al_2O_3 silica Fe_2O_3 TiO_2	
			[ ] (7) PHENOLS		
			[ ] (8) HALOGENS		
			[ ] (9) PCB		
			[ ] (10) METALS		
			[ ] (11) OTHER (specify):		

This figure is a total collected

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X') a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY (mark 'X') a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
Cr^{+6}										

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

[ ] A. HUMAN HEALTH HAZARDS

Continued From Page 4

II. HAZARD DESCRIPTION *(continued)*

☐ B. NON-WORKER INJURY/EXPOSURE

☐ C. WORKER INJURY/EXPOSURE

☐ D. CONTAMINATION OF WATER SUPPLY

☐ E. CONTAMINATION OF FOOD CHAIN

☐ F. CONTAMINATION OF GROUND WATER

☐ G. CONTAMINATION OF SURFACE WATER

Continued From Front

VIII. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA

☐ I. FISH KILL

☐ J. CONTAMINATION OF AIR

☐ K. NOTICEABLE ODORS

☐ L. CONTAMINATION OF SOIL

☐ M. PROPERTY DAMAGE

Continue On Page 7

Continued from Page 6

4. HAZARD DESCRIPTION *(continued)*

[ ] N. FIRE OR EXPLOSION

[ ] O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

[ ] P. SEWER, STORM DRAIN PROBLEMS

[ ] Q. EROSION PROBLEMS

[ ] R. INADEQUATE SECURITY

[ ] S. INCOMPATIBLE WASTES

VIII. HAZARD DESCRIPTION (continued)

☐ T. MIDNIGHT DUMPING

☐ U. OTHER (specify):

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS				
2. IN COMMERCIAL OR INDUSTRIAL AREAS				
3. IN PUBLICLY TRAVELLED AREAS				
4. PUBLIC USE AREAS (parks, schools, etc.)				

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
≤ 50 FT	To the Mobile River	NONE
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)**	**F. DIRECTION TO DRINKING WATER SUPPLY**
N.A.	N.A.	N.A.

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS*

☒ 2. COMMUNITY (specify town) > 15 CONNECTIONS — Connected To The Mobile Water Supply

☒ 3. SURFACE WATER

☐ 4. WELL

Continue On Page 9

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
		none		

I. RECEIVING WATER

1. NAME North Mobile Ind. Treatment Facility (for the Ind. Org. Discharge)
- [ ] 2. SEWERS
- [ ] 3. STREAMS/RIVERS
- [ ] 4. LAKES/RESERVOIRS
- [X] 5. OTHER(specify): P.O.T.W

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

P.O.T.W.

They re-used TN WAIO ... Alum mud Drawn to surface impoundment.

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

- [ ] A. KNOWN FAULT ZONE
- [ ] B. KARST ZONE
- [X] C. 100 YEAR FLOOD PLAIN
- [ ] D. WETLAND
- [ ] E. A REGULATED FLOODWAY
- [ ] F. CRITICAL HABITAT
- [ ] G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
X	1. SAND				Soil surrounding the surface impoundments are of sandy nature. The " "
X	2. CLAY				For Alum mud has 1 Foot of impervious clay as a liner (permeability 10^{-5} to 10^{-7} cm/sec)
	3. GRAVEL				

XIII. SOIL PERMEABILITY

- [ ] A. UNKNOWN
- [ ] B. VERY HIGH (100,000 to 1000 cm/sec.)
- [ ] C. HIGH (1000 to 10 cm/sec.)
- [ ] D. MODERATE (10 to .1 cm/sec.)
- [ ] E. LOW (.1 to .001 cm/sec.)
- [X] F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

- [ ] 1. YES
- [ ] 2. NO

3. COMMENTS:

H. DISCHARGE AREA

- [ ] 1. YES
- [ ] 2. NO

3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

J. OTHER GEOLOGICAL DATA

Continue On Reverse

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X') 1. YES	2. NO	3. UNKNOWN
N.P.D.E.S.	E.P.A. ATL.S.	AL. 0002747	2/13/75	Expired	X		

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☒ NONE ☐ YES (summarize in this space)

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition (Section II) information on the first page of this form.

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
Holding Basin for Organic waste water

2. STABILITY/CONDITION OF EMBANKMENTS
Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*
☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
☒ YES ☐ NO

7. IMPOUNDMENT HAS LINER SYSTEM
☒ YES ☐ NO Cement Basin

7a. INTEGRITY OF LINER SYSTEM CHECKED
☐ YES ☒ NO

7b. FINDINGS
The Concrete Looked OK

8. SOIL STRUCTURE AND SUBSTRUCTURE Basins are lined w/ 6 inches of Reinforced Concrete with water seals at All Joints. Available information for water wells indicate the presence of highly Permeable sands at Relative Shallow Depths (50 FT. MSL or less). Underlying the area, possibly to depths of 100 Feet, are Quaternary-age Alluvial Deposits of Sands, Clay, Silt, Gravel, and Carbonaceous Organic material.

9. MONITORING WELLS
☐ YES ☒ NO

10. LENGTH, WIDTH, AND DEPTH
LENGTH 90 WIDTH 50 DEPTH 6 FT

11. CALCULATED VOLUMETRIC CAPACITY
37,500 cu. FT (7.48 GAL) = 282,963.66 gallons

12. PERCENT OF CAPACITY REMAINING
50%

13. ESTIMATE FREEBOARD
Varies Daily. Any Inflow will go into the Alum mud impoundment

14. SOLIDS DEPOSITION
☒ YES ☐ NO

15. DREDGING DISPOSAL METHOD
Excavated and hauled to Branson Ind. Landfill

16. OTHER EQUIPMENT
N/A

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
Alum mud impoundment

2. STABILITY/CONDITION OF EMBANKMENTS
good

3. EVIDENCE OF SITE INSTABILITY (Erosion, Settling, Sink Holes, etc.)
☒ YES ☐ NO [illegible]

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
☒ YES ☐ NO

7. IMPOUNDMENT HAS LINER SYSTEM * 1 feet of impervious
☒ YES ☐ NO Clay at the bottom.

7a. INTEGRITY OF LINER SYSTEM CHECKED
☐ YES ☒ NO

7b. FINDINGS
Vesta Thompson & Lab of Miss. checked the liner system. Report submitted on MARCH 25, 1977

8. SOIL STRUCTURE AND SUBSTRUCTURE Pond is protected by 1 FT. of impervious Clay Liner. Available information for WATER WELLS INDICATE THE PRESENCE OF highly permeable sands at relative shallow depths (5 feet MSL or less). Underlying THE AREA, possibly TO DEPTHS OF 100 FEET, ARE QUATERNARY-TERTIARY ALLUVIAL DEPOSITS OF SAND, CLAY, SILT, GRAVELS, AND ORGANIC MATERIAL (CARBONACEOUS)

9. MONITORING WELLS
☐ YES ☒ NO

10. LENGTH, WIDTH, AND DEPTH
LENGTH 285 ft. WIDTH 650 ft DEPTH 11 ft

11. CALCULATED VOLUMETRIC CAPACITY (2,039,750 CU. FT) (7.48052) = 15,243,407.3 gallons

12. PERCENT OF CAPACITY REMAINING
75%

13. ESTIMATE FREEBOARD
3 FT

14. SOLIDS DEPOSITION
☒ YES ☐ NO

15. DREDGING DISPOSAL METHOD
Excavated and hauled to Brunson Landfill.

16. OTHER EQUIPMENT
N. A.

LANDFILLS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc)*
☒ YES ☐ NO

2. EVIDENCE OF IMPROPER DISPOSAL OF BULK LIQUIDS, SEMI-SOLIDS AND SLUDGES INTO THE LANDFILL
☒ YES ☐ NO liquids

3. CHECK RECORDS OF CELL LOCATION AND CONTENTS AND BENCHMARK
☐ YES ☐ NO

4. WASTES SURROUNDED BY SORBENT MATERIAL
☐ YES ☐ NO

5. DIVERSION STRUCTURES ARE EFFECTIVELY CONSTRUCTED AND PROPERLY MAINTAINED
☐ YES ☐ NO

6. EVIDENCE OF PONDING OF WATER ON SITE
☐ YES ☐ NO

7. EVIDENCE OF IMPROPER/INADEQUATE DRAINING
☐ YES ☐ NO

8. ADEQUATE LEACHATE COLLECTION SYSTEM *(If "Yes", specify Type)*
☐ YES ☐ NO

8a. SURFACE LEACHATE SPRING
☐ YES ☐ NO

9. RECORDS OF LEACHATE ANALYSIS
☐ YES ☐ NO

10. GAS MONITORING
☐ YES ☐ NO

11. GROUNDWATER MONITORING WELLS
☐ YES ☐ NO

12. ARTIFICIAL MEMBRANE LINER INSTALLED
☐ YES ☐ NO

13. SPECIFIC CONTAINMENT MEASURES *(Clay Bottom, Sides, etc)*
☐ YES ☐ NO

14. FIXATION *(Stabilization)* OF WASTE
☐ YES ☐ NO

15. ADEQUATE CLOSURE OF INACTIVE PORTION OF FACILITY
☐ YES ☐ NO

16. COVER *(Type)*

16a. THICKNESS

16b. PERMEABILITY

16c. DAILY APPLICATION
☐ YES ☐ NO

American Cyanamide, Mobile

EPA

POTENTIAL HAZARDOUS WASTE SITE IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION: IV

SITE NUMBER (to be assigned by Hq): 86

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II *(Preliminary Assessment)*. File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: American Cyanamide Company

B. STREET (or other identifier): Cyanamide road

C. CITY: Mobile

D. STATE: AL.

E. ZIP CODE: 36614

F. COUNTY NAME: Mobile

G. OWNER/OPERATOR (if known)

1. NAME: American Cyanamide
2. TELEPHONE NUMBER: (205) 457-6601

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6. UNKNOWN

Corporation

I. SITE DESCRIPTION

1- [illegible]
2- Holding basin for organic effluent
3- [illegible]

J. HOW IDENTIFIED (i.e., citizen's complaints, OSHA citations, etc.): The company provided information during the Eckhardt Report

K. DATE IDENTIFIED (mo., day, & yr.): mid-1979

L. PRINCIPAL STATE CONTACT

1. NAME: Dan Cooper
2. TELEPHONE NUMBER: (205) 832-6728

II. PRELIMINARY ASSESSMENT (complete this section last)

A. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE ☒ 5. UNKNOWN

B. RECOMMENDATION

☐ 1. NO ACTION NEEDED *(no hazard)*

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☐ 4. SITE INSPECTION NEEDED *(low priority)*

C. PREPARER INFORMATION

1. NAME: Javier A. Colon
2. TELEPHONE NUMBER: (205) 832-6728
3. DATE (mo., day, & yr.): Jan. 28/80

III. SITE INFORMATION

A. SITE STATUS

☒ 1. ACTIVE *(Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)*

☐ 2. INACTIVE *(Those sites which no longer receive wastes.)*

☐ 3. OTHER *(specify)*: *(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)*

B. IS GENERATOR ON SITE?

☐ 1. NO ☒ 2. YES *(specify generator's four-digit SIC Code)*: 2819, 2821, 2899

C. AREA OF SITE (in acres):
1- 7 acres on Company Property
2- ± 30 acres Branson Landfill

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE (deg.—min.—sec.):
2. LONGITUDE (deg.—min.—sec.):

E. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO ☐ 2. YES *(specify)*:

CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

A. TRANSPORTER	B. STORER	C. TREATER	D. DISPOSER
1. RAIL	1. PILE	1. FILTRATION	X 1. LANDFILL OUT SIDE
2. SHIP	X 2. SURFACE IMPOUNDMENT	2. INCINERATION	2. LANDFARM
3. BARGE	3. DRUMS	3. VOLUME REDUCTION	3. OPEN DUMP
4. TRUCK	4. TANK, ABOVE GROUND	X 4. RECYCLING/RECOVERY	4. SURFACE IMPOUNDMENT
X 5. PIPELINE	5. TANK, BELOW GROUND	X 5. CHEM./PHYS. TREATMENT	5. MIDNIGHT DUMPING
6. OTHER (specify):	6. OTHER (specify):	6. BIOLOGICAL TREATMENT	6. INCINERATION
		7. WASTE OIL REPROCESSING	7. UNDERGROUND INJECTION
		8. SOLVENT RECOVERY	8. OTHER (specify):
		9. OTHER (specify):	

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

A.5. Pipeline : on site Transports Organic Discharge To P.O.T.W.
B.2. SURFACE IMPOUNDMENTS : #1: Holding Lagoon For Recovery of WATER ⇔ C.4 Recycling/Recovery of WATER equipment.
#2: For ALUM MUD

C.5. Chem/Phys Treatment : Aeration Lagoons
D.1. LANDFILL : OUTSIDE DUMPING BOUNDARIES, OWNERSHIP SPECIFIED BY MR. BRANSON.

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1 UNKNOWN ☐ 2 LIQUID ☒ 3. SOLID ☒ 4 SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☒ 1 UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4 RADIOACTIVE ☐ 5 HIGHLY VOLATILE
☐ 6 TOXIC ☐ 7 REACTIVE ☐ 8 INERT ☐ 9 FLAMMABLE

☐ 10 OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Yes Laboratory Analysis and records of the Amounts involved

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present. Spec Fuel

X a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE: TON	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE: TONS	UNIT OF MEASURE
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY PHARMACEUTICAL
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGNTD SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
X (5) OTHER (specify): Organic Residue = Paraffins 40% Rosins 40% Sulfonic 20%			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(6) OTHER (specify):
			(6) CYANIDE	X (6) OTHER (specify): Alum Sludge Al_2O_3 Silica Fe_2O_3 TiO_2	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify)		

Continue On Page 3

Continued From [illegible]

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (*place in descending order of hazard*).

might require [illegible] extraction [illegible] for [illegible] such as Chromium, $PH \leq 3$

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

During Period 1937-1977 a Discharge existed to the River, and the Principal Types of wastes (Metal and Organic Residues) had a greater water content. In 7/1/77 they eliminated the Discharge, Connecting it to P.O.T.W. and Delivering a more manageable waste to Landfill.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (*specify*):				

Continue On Reverse

Continued From Front

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- [X] 1 NPDES PERMIT
- [ ] 2 SPCC PLAN
- [X] 3. STATE PERMIT *(specify)*: AWIC
- [X] 4. AIR PERMITS ⟺
- [X] 5. LOCAL PERMIT
- [ ] 6. RCRA TRANSPORTER
- [ ] 7 RCRA STORER
- [ ] 8 RCRA TREATER
- [ ] 9 RCRA DISPOSER
- [ ] 10. OTHER *(specify)*: Note: the Mobile County Board of Health [illegible] Air Permit

B. IN COMPLIANCE?

- [X] 1. YES
- [ ] 2 NO
- [ ] 3. UNKNOWN

4 WITH RESPECT TO *(list regulation name & number)*:

VIII. PAST REGULATORY ACTIONS

- [X] A. NONE
- [ ] B. YES *(summarize below)*

IX. INSPECTION ACTIVITY *(past or on-going)*

- [ ] A NONE
- [X] B. YES *(complete items 1,2,3, & 4 below)*

	1 TYPE OF ACTIVITY	2 DATE OF PAST ACTION (mo., day, & yr.)	3 PERFORMED BY: (EPA/State)	4. DESCRIPTION
1-	Inspection & Monitoring	1-31-79 2-1-80 3-3-80	AWIC STATE	Monitor [illegible] waste [illegible] (P.O.T.W.) [illegible] were done
2-	Mobile County Board of Health, Inspection	7-18-79	Mobile County	Annual visual inspections, no [illegible] were done

X. REMEDIAL ACTIVITY *(past or on-going)*

- [X] A. NONE
- [ ] B. YES *(complete items 1, 2, 3, & 4 below)*

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment *(Section II)* information on the first page of this form.

EPA

POTENTIAL HAZARDOUS WASTE SITE LOG

SITE NUMBER: 86

NOTE: The initial identification of a potential site or incident should not be interpreted as a finding of illegal activity or confirmation that an actual health or environmental threat exists. All identified sites will be assessed under the EPA's Hazardous Waste Site Enforcement and Response System to determine if a hazardous waste problem actually exists.

SITE NAME: American Cyanamide Company

CITY: Mobile | STATE: Ala. | ZIP CODE: 36614

SUMMARY OF POTENTIAL OR KNOWN PROBLEM

1- Waste mud impoundment
2- Holding Basin for Organic Effluent

ITEM	DATE OF DETERMINATION OF COMPLETION	RESPONSIBLE ORGANIZATION OR INDIVIDUAL (EPA, State, Contractor, Other)	PERSON MAKING ENTRY TO LOG FORM	DATE ENTERED ON LOG (mo,day,yr)
1. IDENTIFICATION OF POTENTIAL PROBLEM	1-22-79		Javier A. Colon	2/4/80
2. PRELIMINARY ASSESSMENT	1/22/80		Javier A. Colon	2/4/80
APPARENT SERIOUSNESS OF PROBLEM	☐ HIGH ☐ MEDIUM ☒ LOW ☐ NONE ☐ UNKNOWN			
3. SITE INSPECTION				
4. EPA TENTATIVE DISPOSITION (check appropriate item(s) below)				
☐ a. NO ACTION NEEDED				
☐ b. INVESTIGATIVE ACTION NEEDED				
☐ c. REMEDIAL ACTION NEEDED				
☐ d. ENFORCEMENT ACTION NEEDED				
5. EPA FINAL STRATEGY DETERMINATION (check appropriate item(s) below)				
☐ a. NO ACTION NEEDED				
☐ b. REMEDIAL ACTION NEEDED				
☐ c. REMEDIAL ACTION NEEDED BUT, NO RESOURCES AVAILABLE				
☐ d. ENFORCEMENT ACTION NEEDED				
☐ (1) CASE DEVELOPMENT PLAN PREPARED				
☐ (2) ENFORCEMENT CASE FILED OR ADMINISTRATIVE ORDER ISSUED				
6. STRATEGY COMPLETED				

EPA Form T2070-1 (10-79)

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
AL	D008175408

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
American Cyanamid	P.O. Box 1924

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Mobile	AL	36633	Mobile	097	01

09 COORDINATES LATITUDE	LONGITUDE
30 44 54.0	088 03 29.0

10 DIRECTIONS TO SITE (Starting from nearest public road)
from South on 43 turn left on paper mill Rd., go 3/4 mi. then turn left on Cyanamid Rd., then go 3/4 mi. to Plant

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
American Cyanamid Company	1 Cyanamid Plaza

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Wayne	NJ	07470	(201) 831-2000

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☒ A. RCRA 3001 DATE RECEIVED: 11/07/80 (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☐ YES DATE ___/___/___ (MONTH DAY YEAR)
☒ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
1939 (BEGINNING YEAR) | _____ (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Alum, Toluene

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
release of low pH Alum sludge, spills of Toluene

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☒ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Steve Maurer SCM	ADEM	(205) 271-7723

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Jim Duncan		EPS	(601) 922-8242	09 03 85 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
AL	D008175408

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

☐ A. SOLID ☐ E. SLURRY
☐ B. POWDER, FINES ☐ F. LIQUID
☐ C. SLUDGE ☐ G. GAS
☐ D. OTHER _____ *(Specify)*

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS Unk
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

☐ A. TOXIC ☐ E. SOLUBLE ☐ I. HIGHLY VOLATILE
☐ B. CORROSIVE ☐ F. INFECTIOUS ☐ J. EXPLOSIVE
☐ C. RADIOACTIVE ☐ G. FLAMMABLE ☐ K. REACTIVE
☐ D. PERSISTENT ☐ H. IGNITABLE ☐ L. INCOMPATIBLE
☒ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	N/A		
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	N/A				

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

ADEM Files, Conversation with Ron Melton, Plant Manager

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
AL	D008175408

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None Observed

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

UNK

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

UNK

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

UNK

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

UNK

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

UNK

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: AL | 02 SITE NUMBER: D008175408

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/runoff/standing liquids/leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

UNK

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

UNK

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

UNK

01 ☐ P ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION *(Cite specific references, e. g., state files, sample analysis, reports)*

ADEM Files, Conversation with Ron Melton, Plant Manager

Re: ALD 008 175408

August 14, 1985

Mr. R. B. Melton
Plant Manager
American Cyanamid Company, Inc.
P. O. Box 1924
Mobile, Alabama 36633

Dear Mr. Melton:

On March 31, 1985, the Alabama Department of Environmental Management (ADEM) received a grant from the U. S. Environmental Protection Agency (EPA) to conduct a CERCLA Hazardous Waste Site Inventory Program.

The purpose of the inventory program is to screen and evaluate potential hazardous waste sites and identify any public health or environmental problems these sites may pose.

The list of sites to be screened is determined by EPA, and includes primarily those companies that notified under Section 3005 of RCRA or Section 103(c) of CERCLA (the legislation establishing Superfund).

Since this is a one-time, nonrecurring appropriation, ADEM has elected to complete the inventory by use of a private contractor. Environmental Protection Systems, Inc. (EPS), Jackson, Mississippi, has been selected to perform the necessary work.

The first task of EPS will be to review information in ADEM files. However, in order to verify certain information and fill in data gaps, it will be necessary for EPS to contact each company on the inventory list, by telephone. Telephone contacts will be made within a nine-month period, beginning on July 23, 1985.

In some cases, an inspection will be necessary in order to complete the site assessment report. The inspection phase of the inventory is currently scheduled for October 1985 through March 1986.

In order to carry out this program in a reasonable and timely manner, with a minimum of inconvenience to you, I respectfully request your cooperation and assistance.

If you have any questions about the project, please contact me at (205) 271-7728.

Sincerely,

Stephen C. Maurer, Chief
Special Services Section
Land Division

SCM/bw

LAND PROGRAM

1984 Hazardous Waste Generator and On-Site TSD Annual Report

NOTE: Read all instructions prior to completing this form.

I. Installation EPA ID Number: ALD 008 175 408

II. Name of Installation: American Cyanamid Company

III. Location of Installation: Cyanamid Road
(Street or Route Number)

Mobile (City or Town) | Mobile (County) | AL (State) | 36614 (Zip Code)

IV. Installation Contact: T. E. Hankins (Name) 205 (Area Code) 457-6601 (Telephone Number)

V. Waste Identification:

Line Number	A. EPA Waste Number	B. Description of Waste	C. Quantity Generated (LBS)	D. Amount of Waste by Handling Method			
				1. Handling Method Code	2. Quantity Stored, Treated Disposed, or Recovered On-Site	Shipped to Off-Site Treatment Disposal, or Recovery Facility	
						3. Quantity	4. Facility EPA ID No./Recovery Facility Name
1.	D001	Styrene Monomer, Inh.	2000 lbs.	S01 (0)	4 - 85 gal. drums	2000 lbs.	ALD 000622464
2.	D001	Styrene Monomer, Inh.	1000 lbs.	S01 (0)	2 - 55 gal. drums	1000 lbs.	ALD 000622464
3.	U122	Waste Paraformaldehyde	22000 lbs.	S01 (0)	44 - 55 gal. drums	22000 lbs.	ALD 000622464
4.	U007	Acrylamide 50% Aqueous	90 lbs.		2 - 5 gal. bucket	90 lbs.	ALD 000622464
5.							

(If more space is needed, check ☐ and complete Attachment I)

VI. Closure Cost Estimate for Facilities $ 11,573.00

VII. Cost Estimate for Post-Closure Monitoring and Maintenance (Disposal Facility Only) $ N/A

VIII. Certification:

R. B. Melton (Signature) | R. B. Melton (Print or Type Name) | Plant Manager (Title)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
LAND PROGRAM
1983 Hazardous Waste Generator and On-Site TSD Facility Annual Report

NOTE: Read all instructions prior to completing this form.

I. Installation EPA ID Number: A L D 0 0 8 1 1 7 5 4 0 8

II. Name of Installation: AMERICAN CYANAMID COMPANY

III. Location of Installation: Cyanamid Road
(Street or Route Number)

Mobile	Mobile	AL	36614
(City or Town)	(County)	(State)	(Zip Code)

IV. Installation Contact: T. E. Hankins 205 457-6601
(Name) (Area Code) (Telephone Number)

V. Waste Identification:

Line Number	A. EPA Waste Number	B. Description of Waste	C. Quantity Generated (LBS)	D. Amount of Waste by Handling Method			
				1. Handling Method Code	2. Quantity Stored, Treated Disposed, or Recovered On-Site	Shipped to Off-Site Treatment Disposal, or Recovery Facility	
						3. Quantity	4. Facility EPA ID No./Recovery Facility Name
1.	U007	Waste Combustible Liquid, N.O.S.	41,410#	S01 (0)	82 - 55 gal. drums	41,410#	ALD 000622464
XX	(Petroleum Naptha & Acrylamide from		Polyacrylamide	Emulsion Manufacturing)			
2.	U007	Hazardous Waste Solid, N.O.S.	935#	S01 (0)	2 - 55 gal. drums	935#	ALD 000622454
XX		(Acrylamide)					
5.							

(If more space is needed, check ☐ and complete Attachment I)

VI. Closure Cost Estimate for Facilities $ 10,700.00

VII. Cost Estimate for Post-Closure Monitoring and Maintenance (Disposal Facility Only) $ ___ N/A

VIII. Certification:

	R. B. Melton	Plant Manager
(Signature)	(Print or Type Name)	(Title)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
LAND PROGRAM

American Cyanamid Company

19 82 Hazardous Waste Generator and On-Site TSD Facility Annual Report

NOTE: Read all instructions prior to completing this form.

I. Installation EPA ID Number: ALD 008 175 408

II. Name of Installation: American Cyanamid Company

III. Location of Installation: Cyanamid Road
(Street or Route Number)

Mobile	Mobile	Alabama	36614
(City or Town)	(County)	(State)	(Zip Code)

IV. Installation Contact: T. L. Hankins 205 457-6601
(Name) (Area Code) (Telephone Number)

V. Waste Identification:

Line Number	A. EPA Waste Number	B. Description of Waste	C. Quantity Generated (LBS)	D. Amount of Waste by Handling Method			
				1. Handling Method Code	2. Quantity Stored, Treated Disposed, or Recovered On-Site	Shipped to Off-Site Treatment Disposal, or Recovery Facility	
						3. Quantity	4. Facility EPA ID No./Recovery Facility Name
1.	D001	Styrene Monomer, Inhibited	17,325#	S01 (O)	42 - 55 gal. drums	17,325#	ALD 000622464
2.		Flammable Liquid					
3.							
4.							
5.							

(If more space is needed, check ☐ and complete Attachment I)

VI. Closure Cost Estimate for Facilities $ 10,700.00

VII. Cost Estimate for Post-Closure Monitoring and Maintenance (Disposal Facility Only) $ N/A

VIII. Certification:

R. R. Melton — Plant Manager
(Signature) (Print or Type Name) (Title)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information

RZ
RS

JUL 26 1985

4WD-RM

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. R. B. Melton
Plant Superintendent
American Cyanamid Company
Cyanamid Road
Post Office Box 1924
Mobile, Alabama 36601

Re: American Cyanamid - EPA I.D. Number ALD 008 175 408
Your letter to EPA dated July 2, 1985

Dear Mr. Melton:

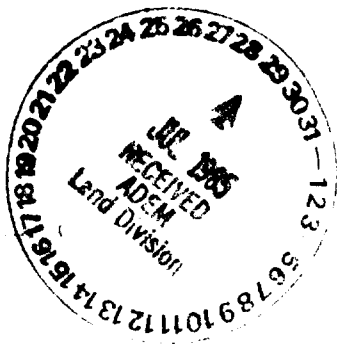
This is in reference to our telephone conversation on July 22, 1985. As discussed, please submit the documentation required by 40 CFR §260.31(b) (50 FR 662). This information will be evaluated to determine applicability of the solid waste variance for your process solvent toluene waste stream. If the toluene stream is determined a solid waste, then additional information will be required to determine all RCRA regulated units associated with storage and/or disposal.

If there are questions, please contact Caron Falconer at 404/881-3067.

Sincerely yours,

James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division

cc: Daniel E. Cooper, Alabama Department of Environmental Management
Allan Antley, Waste Compliance Section



Inspection
American
Cyanamid
Mobile

CYANAMID

American Cyanamid Company
Wayne, NJ 07470

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 12, 1982

Mr. Michael Smith
Department of Public Health
Division of Solid & Hazardous Waste
434 Monroe Street
Montgomery, AL 36130

Gentlemen:

American Cyanamid Company (or one of its subsidiaries) operates plants in your state which are subject to regulation as treatment, storage or disposal facilities under the Resource Conservation & Recovery Act (RCRA). These plants are listed in the attached Certificate of Insurance.

Cyanamid chooses to demonstrate compliance with the requirements of 40CFR264.147 and 40CFR265.147, which call for proof of liability insurance covering sudden and accidental releases at these RCRA facilities, by providing the attached Certificate of Insurance for these facilities to your office.

We believe that this submittal fulfills all of Cyanamid's present responsibilities and obligations under this aspect of these regulations.

If you have any questions regarding this submittal, please contact the undersigned at (201) 831-3261.

Very truly yours,

AMERICAN CYANAMID COMPANY

T. A. Caldwell, Jr.
Director, Corporate Insurance

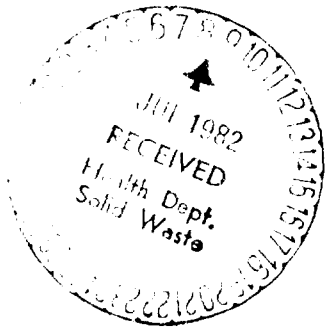
TAC:kr
Attachment

CYANAMID

American Cyanamid Company

June 30, 1982

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



Mr. Michael Smith
Department of Public Health
Division of Solid & Hazardous Waste
434 Monroe Street
Montgomery, AL 36130

Dear Mr. Smith:

American Cyanamid Company (or one of its subsidiaries) operates the following plants in your state which are subject to regulation as treatment, storage or disposal facilities under the Resource Conservation and Recovery Act (RCRA):

		Cost Estimates	
EPA I.D. No.	Location	Closure	Post Closure
ALD008175408	Mobile	$10,000	-

Cyanamid chooses to demonstrate financial assurance for closure/post-closure care of the RCRA facilities at these locations through the financial test specified in Subpart H of 40CFR Parts 264 and 265. In support of this action, the attached letter and certification have been sent to the Regional Office of the EPA Region in which your state is located.

The attached copies are being sent to you for your information and use.

We believe that this submittal fulfills all of Cyanamid's present responsibilities and obligations under this aspect of these regulations.

If you have any questions regarding this submittal, please contact Ted Harris at (201) 831-3901.

Very truly yours,

AMERICAN CYANAMID COMPANY

T. Harris

TH0630/fjl

ATTACHMENT

File Amer. Cyanamid
(Mobile Co.)

December 17, 1981

Mr. R. B. Melton
Plant Manager
American Cyanamid Company
P. O. Box 1924
Mobile, Alabama 36601

Dear Mr. Melton:

This is in response to your October 1, 1981, letter requesting permission to dispose of 27,200 pounds of stearic anhydride in the Chunchula Landfill. Based upon the fact that your company has proven the waste to be non-hazardous, permission to dispose of this material is granted.

If you have any questions about this matter or if we can be of further assistance, please contact this offise.

Sincerely,

[illegible], Pollution Control Specialist
Division of Solid and Hazardous Waste
Environmental Health Administration

LS:ws

cc: Roy Howard

May 22, 1981

M E M O R A N D U M

TO: C. R. Rothenanger
Plant Superintendent
American Cyanamid Company

FROM: L. G. Linn, Jr.
Reference Analyst
Monitoring & Surveillance Section
Division of Solid & Hazardous Waste

RE: Results of Samples from Monitoring Well

The results from samples taken from your monitoring wells on April 1, 1981 are enclosed. The concentrations reported look quite normal for your area. The next scheduled sampling trip will be during September 1981 to complete background studies.

LGL:hj

Enclosures

STATE OF ALABAMA HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH ADMINISTRATION
DIVISION OF SOLID AND HAZARDOUS WASTE

American Cyanamide Co.	SW 903-906	L. G. Linn, Jr.
Sampling Location	Laboratory Sample Number	Collector
4/1/81	MW #4	5/15/81
Collection Date	Type Analysis	Date Reported

Other Sample Information

H	6.6		Arsenic as As	<.01	mg/l
pecific Conductance		umho/cm	Barium as Ba	<.5	mg/l
otal Dissolved Solids	209	mg/l	Cadmium as Cd	<.05	mg/l
lkalinity, Total as $CaCO_3$	115	mg/l	Chromium as Cr	<.05	mg/l
cidity, Total Mineral, as $CaCO_3$		mg/l	Lead as Pb	<.5	mg/l
hloride as Cl^-	4.0	mg/l	Mercury as Hg	<.001	mg/l
hromate as CrO_4		mg/l	Selenium as Se	<.01	mg/l
luoride		mg/l	Silver as Ag	<.05	mg/l
ardness, EDTA as $CaCO_3$		mg/l	Aluminum as Al	0.88	mg/l
itrate Nitrogen as N	.27	mg/l	Calcium as Ca		mg/l
hosphate as P	<.1	mg/l	Copper as Cu		mg/l
ilica as SiO_2		mg/l	Iron as Fe	0.89	mg/l
ulfate as SO_4	14.5	mg/l	Magnesium as Mg		mg/l
urbidity		JTU	Manganese as Mn		mg/l
hemical Oxygen Demand (COD)	7.6	mg/l	Nickel as Ni		mg/l
yanide as CN		mg/l	Potassium as K		mg/l
il and Grease		mg/l	Sodium as Na	5.8	mg/l
henols	<.02	mg/l	Zinc as Zn		mg/l
cid Extractables		mg/l	Pesticides		mg/l
ase Neutrals		mg/l	Lindane		mg/l
rganochlorine Pesticides	Ø	mg/l	Endrin		mg/l
rganophosphorous Pesticides	Ø	mg/l	Toxaphene		mg/l
olatile Organics		mg/l	Methoxyclor		mg/l
CB's	Ø	mg/l	Herbicides		mg/l
		mg/l	2,4-D		mg/l
		mg/l	2,4,5-TP		mg/l
		mg/l	Radioactivity		
			Alpha		pCi/l
emarks:			Beta		pCi/l
			Gamma Scan		

ow

DPH-F-SW-3/Rev. 01/81

STATE OF ALABAMA HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH ADMINISTRATION
DIVISION OF SOLID AND HAZARDOUS WASTE

American Cyanamid Company	SW 899-902	L. G. Linn, Jr.
Sampling Location	Laboratory Sample Number	Collector
4/1/81	MW #3	5/15/81
Collection Date	Type Analysis	Date Reported

Muddy water, water level at 6 feet

Other Sample Information

H	6.1	Arsenic as As	<.01 mg/l
pecific Conductance	umho/cm	Barium as Ba	<.5 mg/l
otal Dissolved Solids	523 mg/l	Cadmium as Cd	<.05 mg/l
lkalinity, Total as $CaCO_3$	45 mg/l	Chromium as Cr	<.05 mg/l
cidity, Total Mineral, as $CaCO_3$	mg/l	Lead as Pb	<.5 mg/l
hloride as Cl^-	2.5 mg/l	Mercury as Hg	<.001 mg/l
hromate as CrO_4	mg/l	Selenium as Se	<.01 mg/l
luoride	mg/l	Silver as Ag	<.05 mg/l
ardness, EDTA as $CaCO_3$	mg/l	Aluminum as Al	4.93 mg/l
itrate Nitrogen as N	.25 mg/l	Calcium as Ca	mg/l
hosphate as P	mg/l	Copper as Cu	mg/l
ilica as SiO_2	mg/l	Iron as Fe	14.81 mg/l
ulfate as SO_4	62.0 mg/l	Magnesium as Mg	mg/l
urbidity	JCU	Manganese as Mn	mg/l
hemical Oxygen Demand (COD)	22.9 mg/l	Nickel as Ni	mg/l
yanide as CN	mg/l	Potassium as K	mg/l
	mg/l	Sodium as Na	17.6 mg/l
	<.02 mg/l	Zinc as Zn	mg/l
	mg/l	Pesticides	mg/l
ase Neutrals	mg/l	Lindane	mg/l
rganochlorine Pesticides	Ø mg/l	Endrin	mg/l
rganophosphorous Pesticides	Ø mg/l	Toxaphene	mg/l
olatile Organics	mg/l	Methoxyclor	mg/l
CB's	mg/l	Herbicides	mg/l
	mg/l	2,4-D	mg/l
	mg/l	2,4,5-TP	mg/l
	mg/l	Radioactivity	
		Alpha	pCi/l
marks:		Beta	pCi/l
		Gamma Scan	

DPH-F-SW-3/Rev. 01/81

STATE OF ALABAMA HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH ADMINISTRATION
DIVISION OF SOLID AND HAZARDOUS WASTE

American Cyanamid Company	SW-895-898	L. G. Linn, Jr.
Sampling Location	Laboratory Sample Number	Collector
4/1/81	MW #2	5/15/81
Collection Date	Type Analysis	Date Reported

Clear water, water level at 16 feet

Other Sample Information

pH	5.1		Arsenic as As	< .01	mg/l
Specific Conductance		umho/cm	Barium as Ba	< .5	mg/l
Total Dissolved Solids	61	mg/l	Cadmium as Cd	< .05	mg/l
Alkalinity, Total as $CaCO_3$	20	mg/l	Chromium as Cr	< .05	mg/l
Acidity, Total Mineral, as $CaCO_3$		mg/l	Lead as Pb	< .5	mg/l
Chloride as Cl^-	4.0	mg/l	Mercury as Hg	< .001	mg/l
[illegible]		mg/l	Selenium as Se	< .01	mg/l
Fluoride	< 0.1	mg/l	Silver as Ag	< .05	mg/l
Hardness, EDTA as $CaCO_3$		mg/l	Aluminum as Al	1.35	mg/l
Nitrate Nitrogen as N	0.48	mg/l	Calcium as Ca		mg/l
Phosphate as P	< .1	mg/l	Copper as Cu		mg/l
Silica as SiO_2		mg/l	Iron as Fe	1.49	mg/l
Sulfate as SO_4	3.0	mg/l	Magnesium as Mg		mg/l
Turbidity		JTU	Manganese as Mn		mg/l
Chemical Oxygen Demand (COD)	13.7	mg/l	Nickel as Ni		mg/l
Cyanide as CN		mg/l	Potassium as K		mg/l
Oil and Grease		mg/l	Sodium as Na	2.2	mg/l
Phenols	< .02	mg/l	Zinc as Zn		mg/l
Acid Extractables		mg/l	Pesticides		mg/l
Base Neutrals		mg/l	Lindane		mg/l
Organochlorine Pesticides	Ø	mg/l	Endrin		mg/l
Organophosphorous Pesticides	Ø	mg/l	Toxaphene		mg/l
Volatile Organics		mg/l	Methoxyclor		mg/l
PCB's	Ø	mg/l	Herbicides		mg/l
		mg/l	2,4-D		mg/l
		mg/l	2,4,5-TP		mg/l
		mg/l	Radioactivity		
			Alpha		pCi/l
Remarks:			Beta		pCi/l
			Gamma Scan		

bw

ADPH-F-SW-3/Rev. 01/81

STATE OF ALABAMA HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH ADMINISTRATION
DIVISION OF SOLID AND HAZARDOUS WASTE

American Cyanamid Chemical Co.	SW-891-894	L. G. Linn, Jr.
Sampling Location	Laboratory Sample Number	Collector
4/1/81	MW #1	5/15/81
Collection Date	Type Analysis	Date Reported

Clear water, water level at 12 feet

Other Sample Information

pH	5.7		Arsenic as As	<.01	mg/l
Specific Conductance		umho/cm	Barium as Ba	<.5	mg/l
Total Dissolved Solids	108	mg/l	Cadmium as Cd	<.05	mg/l
Alkalinity, Total as $CaCO_3$	30	mg/l	Chromium as Cr	<.05	mg/l
Acidity, Total Mineral, as $CaCO_3$		mg/l	Lead as Pb	<.5	mg/l
Chloride as Cl^-	8.5	mg/l	Mercury as Hg	<.001	mg/l
Chromate as CrO_4		mg/l	Selenium as Se	<.01	mg/l
Fluoride	<0.1	mg/l	Silver as Ag	<.05	mg/l
Hardness, EDTA as $CaCO_3$		mg/l	Aluminum as Al	.95	mg/l
Nitrate Nitrogen as N	.28	mg/l	Calcium as Ca		mg/l
Phosphate as P	<.1	mg/l	Copper as Cu		mg/l
Silica as SiO_2		mg/l	Iron as Fe	4.28	mg/l
Sulfate as SO_4	17.5	mg/l	Magnesium as Mg		mg/l
Turbidity		JTU	Manganese as Mn		mg/l
Chemical Oxygen Demand (COD)	22.9	mg/l	Nickel as Ni		mg/l
Cyanide as CN		mg/l	Potassium as K		mg/l
Oil and Grease		mg/l	Sodium as Na	12.0	mg/l
Phenols	<.02	mg/l	Zinc as Zn		mg/l
Acid Extractables		mg/l	Pesticides		mg/l
Base Neutrals		mg/l	Lindane		mg/l
Organochlorine Pesticides	Ø	mg/l	Endrin		mg/l
Organophosphorous Pesticides	Ø	mg/l	Toxaphene		mg/l
Volatile Organics		mg/l	Methoxyclor		mg/l
PCB's	Ø	mg/l	Herbicides		mg/l
		mg/l	2,4-D		mg/l
		mg/l	2,4,5-TP		mg/l
		mg/l	Radioactivity		
			Alpha		pCi/l
Remarks:			Beta		pCi/l
			Gamma Scan		

ADPH-F-SW-3/Rev. 01/81

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

EPA

U[illegible]VIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F A L D 0 0 8 1 7 5 4 0 8

LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

000677

RECEIVED

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	MARK 'X' NO	MARK 'X' FORM ATTACHED	SPECIFIC QUESTIONS	MARK 'X' YES	MARK 'X' NO	MARK 'X' FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X			D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: A M E R I C A N C Y A N A M I D C O M P A N Y

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 M E L T O N, R, P L T, S U P E R I N T E N D E N T	2 0 5 4 5 7 6 6 0 1

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 P O B O X 1 9 2 4

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 M O B I L E	A L	3 6 6 3 3

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 C Y A N A M I D R O A D

B. COUNTY NAME: M O B I L E

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)
6 M O B I L E	A L	3 6 6 3 3	

EPA Form 3510-1 (6-80)

CONTINUE ON REVERSE

NTINUED FROM THE FRONT

I. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
2819 (specify) Alum	7 2899 (specify) Industrial and Rosin Sizes, and Water Treating Compounds
C. THIRD	**D. FOURTH**
2821 (specify) Synthetic Resins	7 (specify)

II. OPERATOR INFORMATION

A. NAME

AMERICAN CYANAMID COMPANY

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)

F = FEDERAL; S = STATE; P = PRIVATE; M = PUBLIC (other than federal or state); O = OTHER (specify)

P (specify)

D. PHONE (area code & no.) A 201 831 2000

E. STREET OR P.O. BOX

ERDAN AVENUE

F. CITY OR TOWN

[illegible]TYNE

G. STATE NJ

H. ZIP CODE 07470

IX. INDIAN LAND

Is the facility located on Indian lands? [ ] YES [X] NO

III. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water) N AL0002747

D. PSD (Air Emissions from Proposed Sources) 0 P

See attached sheet for additional State permits

B. UIC (Underground Injection of Fluids)

E. OTHER (specify) 5 5037-5007-0003 (specify) Alabama Air Permit

C. RCRA (Hazardous Wastes) R

E. OTHER (specify) 5 5037-5007-0004 (specify) Alabama Air Permit

IV. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

The American Cyanamid Company's Mobile Plant is engaged in the production of alum, sizing for paper products, and synthetic resins.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
E. E. Standring, President Industrial Products Division	E. E. Standring	11/7/84

COMMENTS FOR OFFICIAL USE ONLY

EPA Form 3510-1 (6-80) REVERSE

Print or type in the unshaded areas only
(areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U[illegible]IRONMENTAL PROTECTION AGENCY

HAZA[illegible]OUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

F A L D 0 0 8 1 7 5 4 0 8 3 1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

[ ] 2. NEW FACILITY *(Complete item below.)*

C	YR.	MO.	DAY
8	3 9	0 2	0 1

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

YR.	MO.	DAY

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP Y/A C 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	60,500	G		7				
2					8				
3					9				
4					10				

Continued from the front.

II. PROCESSES *(continued)*

E. SPACE FOR ADDITIONAL PROCESS CODES OR DESCRIBING OTHER PROCESSES *(code "T04")* FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Line No.	Process Code	Explanation
1	S01	Waste is accumulated in 55 gallon drums.

V. DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** – For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. PROCESS CODES:
   For listed hazardous waste: For each **listed** hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non–listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate **all** the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
					included with above

...ued from page 2.
Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY
W A L D 0 0 8 1 7 5 4 0 8 3 1	W DUP 2 DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U122	(See note)	P	S01	
2	U122	(See note)	P	S01	
3	U122	(See note)	P	S01	
4	D001	38,000	P	S01	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

itinued from the front.

DESCRIPTION OF HAZARDOUS WASTE (continued)

USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE

Line No.	EPA Waste No.	Explanation
1 - 3	U122, U147, U190	Waste from the cleanup of anticipated spills, leaks, etc.; quantity cannot be determined.

EPA I.D. N... (from page 1)

T S 4 0 8 3

existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

PHOTOGRAPHS

existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, atment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
30 44 05 54	088 03 02 9

I. FACILITY OWNER

X A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
	C G		

OWNER CERTIFICATION

ertify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached cuments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the bmitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, cluding the possibility of fine and imprisonment.

NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
E. E. Standring, President Industrial Products Division	E.E. Standring	11/5/80

OPERATOR CERTIFICATION

ertify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached cuments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the bmitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, cluding the possibility of fine and imprisonment.

NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED

EPA NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

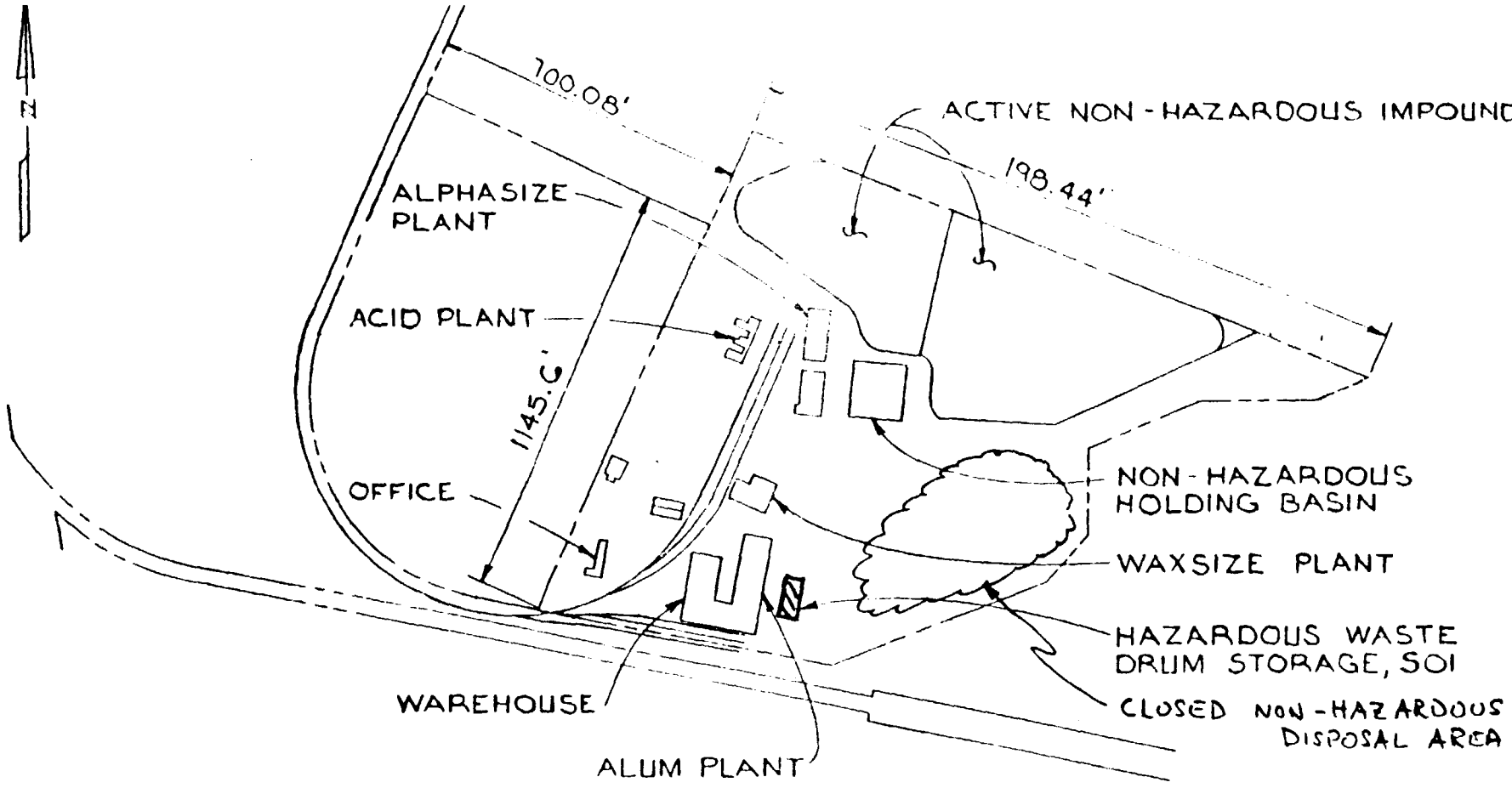
FORM 1. EPA GENERAL INFORMATION

EPA I.D. NO. ALD008175408

X. Existing Environmental Permits (cont.)

503-5007-0005	503-5007-8709	503-5007-8723
503-5007-0006	503-5007-8710	503-5007-8724
503-5007-0007	503-5007-8711	503-5007-8725
503-5007-0008	503-5007-8712	503-5007-8726
503-5007-0009	503-5007-8713	503-5007-8727
503-5007-0010	503-5007-8714	503-5007-8728
503-5007-8701	503-5007-8715	503-5007-8729
503-5007-8702	503-5007-8716	503-5007-8730
503-5007-8703	503-5007-8717	503-5007-8731
503-5007-8704	503-5007-8718	503-5007-8732
503-5007-8705	503-5007-8719	503-5007-8733
503-5007-8706	503-5007-8720	503-5007-8734
503-5007-8707	503-5007-8721	503-5007-8735
503-5007-8708	503-5007-8722	503-5007-8736

State Indirect Discharge Permit: no number. Effective 3/5/80.

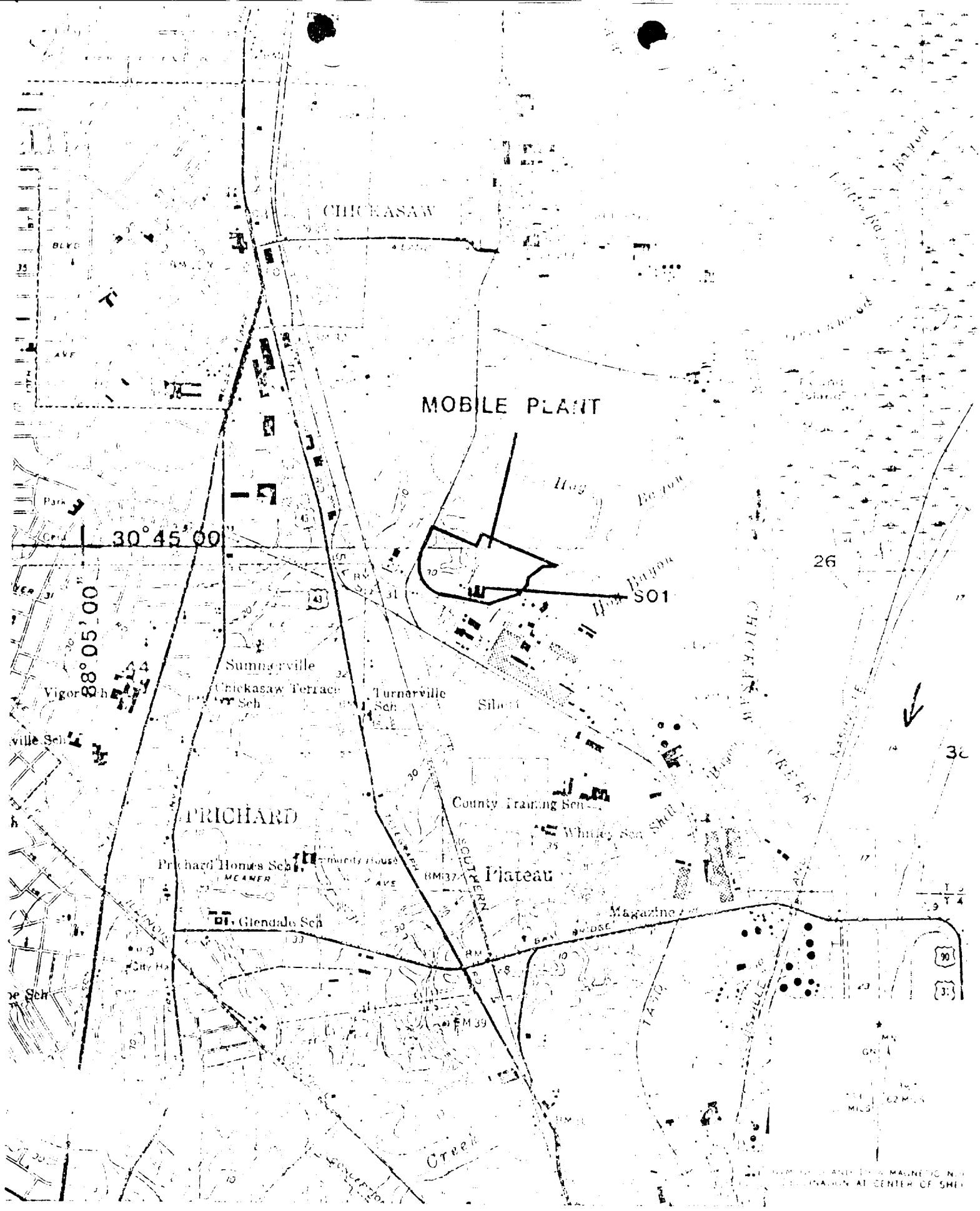


ITY DRAWING (see page 4)

WALDEMAR S. NELSON AND COMPANY
INCORPORATED
ENGINEERS AND ARCHITECTS
1200 ST. CHARLES AVE. NEW ORLEANS, LA.

MOBILE PLANT
AMERICAN CYANAMID CO.

LOCATION PLAN
SCALE: 1" = 400'



LEGEND

Property Line ——

LOCATION MAP

AMERICAN CYANAMID COMPANY

PLANT

SCALE 1:24,000

1000 0 1000 Ft.

EPA

POTENTIAL HAZARDOUS WASTE SITE LOG

SITE NUMBER: 86

NOTE The initial identification of a potential site or incident should not be interpreted as a finding of illegal activity or confirmation that an actual health or environmental threat exists. All identified sites will be assessed under the EPA's Hazardous Waste Site Enforcement and Response System to determine if a hazardous condition actually exists.

SITE NAME: American Cyanamide Company

CITY: Mobile | STATE: Ala. | ZIP CODE: 36614

SUMMARY OF POTENTIAL OR KNOWN PROBLEM

ITEM	DATE OF DETERMINATION OR COMPLETION	RESPONSIBLE ORGANIZATION OR INDIVIDUAL (EPA, State, Contractor, Other)	PERSON MAKING ENTRY TO LOG FORM	DATE ENTERED ON LOG (mo, day, yr)
1. IDENTIFICATION OF POTENTIAL PROBLEM	n/a		Javier A. Colón	2/4/80
2. PRELIMINARY ASSESSMENT	2/4/80		Javier A. Colón	2/4/80
APPARENT SERIOUSNESS OF PROBLEM	HIGH	MEDIUM X LOW	NONE	UNKNOWN
3. SITE INSPECTION	11/26/80		[illegible]	3/19/80
4. EPA TENTATIVE DISPOSITION (check appropriate item(s) below)				
a. NO ACTION NEEDED				
b. [illegible] ACTION NEEDED				
c. REMEDIAL ACTION NEEDED				
d. ENFORCEMENT ACTION NEEDED				
5. FINAL STRATEGY DETERMINATION (check appropriate item(s) below)				
a. NO ACTION NEEDED				
b. REMEDIAL ACTION NEEDED				
c. REMEDIAL ACTION NEEDED BUT, NO RESOURCES AVAILABLE				
d. ENFORCEMENT ACTION NEEDED				
(1) CASE DEVELOPMENT PLAN PREPARED				
(2) ENFORCEMENT CASE FILED OR ADMINISTRATIVE ORDER ISSUED				
6. STRATEGY COMPLETED				

EPA Form T2070-1 (10-79)

POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

EPA

REGION: IV

SITE NUMBER (To be assigned by HQ): 86

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (*Preliminary Assessment*). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (*EN-335*); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: American Cyanamide Company

B. STREET (or other identifier): Cyanamide road

C. CITY: Mobile

D. STATE: AL. E. ZIP CODE: 36614 F. COUNTY NAME: Mobile

G. OWNER/OPERATOR (If known)

1. NAME: American Cyanamide

2. TELEPHONE NUMBER: (205) 459-6601

3. STREET: 4. CITY: 5. STATE: 6. COUNTY: 7. MUNICIPAL: 8. PRIVATE: X 9. FEDERAL:

Corporation

H. SITE DESCRIPTION

I. HOW IDENTIFIED (i.e., citizen's complaints, OSHA citations, etc.)

The company provided information during the Eckhardt Report

J. DATE IDENTIFIED (mo., day, & yr.): mid-1979

K. PRINCIPAL STATE CONTACT

1. NAME: Dan Cooper

2. TELEPHONE NUMBER: (205) 832-6728

II. PRELIMINARY ASSESSMENT (complete this section last)

A. APPARENT SERIOUSNESS OF PROBLEM

[ ] 1. HIGH [ ] 2. MEDIUM [ ] 3. LOW [ ] 4. NONE [X] 5. UNKNOWN

B. RECOMMENDATION

[ ] 1. NO ACTION NEEDED (*no hazard*)

[ ] 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR
b. WILL BE PERFORMED BY

[ ] 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR
b. WILL BE PERFORMED BY

[ ] 4. SITE INSPECTION NEEDED (*low priority*)

C. PREPARER INFORMATION

1. NAME: Javier A. Colon

2. TELEPHONE NUMBER: (205) 832-6728

3. DATE (mo., day, & yr.): JAN. 28/80

III. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (*Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.*)

[ ] 2. INACTIVE (*Those sites which no longer receive wastes.*)

[ ] 3. OTHER (*specify*): (*Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.*)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES (*specify generator's four-digit SIC Code*) 2819, 2821, 2899

C. AREA OF SITE (*In acres*)

7 ACRES on Company Property

± 30 ACRES BRUNSON Land Fill

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE (*deg.—min.—sec.*)

2. LONGITUDE (*deg.—min.—sec.*)

E. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [ ] 2. YES (*specify*):

Continue On Reverse

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL	X	1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
X	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify)		6. OTHER (specify)		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify)
					9. OTHER (specify)		

E. SUPPLY DETAILS OF SITE ACTIVITIES AS NEEDED

A.5 Pipeline [illegible] Te Transport Organic Discharge [illegible]

B.2 SURFACE IMPOUNDMENTS; #1 [illegible] Lagoon [illegible] ⟺ [illegible]

#2 [illegible]

[illegible] LANDFILL: outside property [illegible] operated by [illegible] Brunson

V. WASTE RELATED INFORMATION

A. WASTE TYPE

1. UNKNOWN 2. LIQUID [X] 3. SOLID [X] 4. SLUDGE 5. GAS

B. WASTE CHARACTERISTICS

1. UNKNOWN 2. CORROSIVE 3. IGNITABLE 4. RADIOACTIVE 5. HIGHLY VOLATILE
6. TOXIC 7. REACTIVE 8. INERT 9. FLAMMABLE

10. OTHER (specify)

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Yes [illegible] [illegible] the amounts [illegible]

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present. 1,000 Hundred Ton the Figure is Total collected at Both site From 1937 To 1979

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE Ton	UNIT OF MEASURE
(1) PAINT, PIGMENTS	(1) OILY WASTES	[X] (1) HALOGENATED SOLVENTS	[X] (1) ACIDS	[X] (1) FLYASH	[X] (1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGE	(2) OTHER (specify)	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify)	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
[X] (5) OTHER (specify) Organic Residue = Paraffins 40% Rosins 40% Surface Soil 20%			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify)
			(6) CYANIDE	[X] (6) OTHER (specify): Alum Sludge Al_2O_3 Silica FeO_3 TiO_2	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify)		

Continue On Page 3

Indicate the major site activity(ies) and d relating to each activity by marking 'X' in th appropriate boxes.

A. TRANSPORTER	B. STORER	C. TREATER	D. DISPOSER
X	X	X	

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (*place in descending order of hazard*).

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER (*specify*)				

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE

[X] 1. NPDES PERMIT [ ] 2. SPCC PLAN [X] 3. STATE PERMIT (specify) [illegible]

[X] 4. AIR PERMITS [X] 5. LOCAL PERMIT [ ] 6. RCRA TRANSPORTER

[ ] 7. RCRA STORER [ ] 8. RCRA TREATER [ ] 9. RCRA DISPOSER

[ ] 10. OTHER (specify) [illegible]

B. [illegible]

2. NO 3. UNKNOWN

C. WITH RESPECT TO (i.e., regulation name & number) [illegible]

VIII. PAST REGULATORY ACTIONS

A. [illegible] B. YES (complete below)

IX. INSPECTION ACTIVITY (past or on-going)

[ ] A. NONE [X] B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY (EPA/State)	4. DESCRIPTION
Air Emission Monitoring	1-31-79 2-1-80	AIR & STATE	[illegible]
Mobile County Board of Health, Inspection	1-15-79	Mobile County	Annual visual inspection by [illegible]

X. REMEDIAL ACTIVITY (past or on-going)

[X] A. NONE [ ] B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.

VII. PERMIT INFORMATION

EPA

POT TIAL HAZARDOUS WASTE SITE
E INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by HQ)
IV	86

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (*Section II*). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (*EN-335*); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET (or other identifier)		
AMERICAN CYANAMID Co.	Cyanamide Road		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
Mobile	Ala.	36614	Mobile

G. SITE OPERATOR INFORMATION

1. NAME	2. TELEPHONE NUMBER		
AMERICAN Cyanamid	(205) 457-6601		
3. STREET	**4. CITY**	**5. STATE**	**6. ZIP CODE**
Cyanamid Road	Mobile	Ala.	36614

H. REALTY OWNER INFORMATION (*If different from operator of site*)

1. NAME	2. TELEPHONE NUMBER	
3. CITY	**4. STATE**	**5. ZIP CODE**

I. SITE DESCRIPTION

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (*complete this section last*)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM
	☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
3. ORGANIZATION	**4. TELEPHONE NO. (area code & no.)**	

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.

C. SITE REPRESENTATIVES INTERVIEWED (*corporate officials, workers, residents*)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS

D. GENERATOR INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
American Cyanamid	(205)457-[illegible]21	Cyanamid Road/Mobile 36614	

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
BRunson Industrial Waste Landfill	(205)675-4187	Mr. W. D. BRunson, Pres., BRunson Construction Company 35 Station St., Saraland, Ala. 36571
[illegible] 1/4	SE 1/4 SE 1/4	[illegible]

G. DATE OF INSPECTION (mo., day, & yr.)	H. TIME OF INSPECTION	I. ACCESS GAINED BY (credentials must be shown in all cases)
11/5/80	10 A.M.	☒ 1. PERMISSION ☐ 2. WARRANT

J. WEATHER (describe)

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER			
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER (specify)			

B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS

Continued From Page 2

V. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS
   - [ ] a. GROUND
   - [ ] b. AERIAL
2. PHOTOS IN CUSTODY OF

D. SITE MAPPED?

[ ] YES. SPECIFY LOCATION OF MAPS

E. COORDINATES

1. LATITUDE (deg.-min.-sec.)
2. LONGITUDE (deg.-min.-sec.)

V. SITE INFORMATION

A. SITE STATUS

- [X] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)
- [ ] 2. INACTIVE (Those sites which no longer receive wastes.)
- [ ] 3. OTHER (specify) (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

- [ ] 1. NO
- [X] 2. YES (specify generator's four-digit SIC Code) 2819, 2821, 2899

C. AREA OF SITE (in acres)

?? acres

D. ARE THERE BUILDINGS ON THE SITE?

- [ ] 1. NO
- [X] 2. YES (specify) [illegible]

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
		X		X		X	
	1. RAIL		1. PILE		1. FILTRATION	X	1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this form.

- [ ] 1. STORAGE
- [ ] 2. INCINERATION
- [X] 3. LANDFILL
- [X] 4. SURFACE IMPOUNDMENT
- [ ] 5. DEEP WELL
- [ ] 6. CHEM/BIO/PHYS TREATMENT
- [ ] 7. LANDFARM
- [ ] 8. OPEN DUMP
- [ ] 9. TRANSPORTER
- [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. TYPE

- [ ] 1. LIQUID
- [X] 2. SOLID
- [X] 3. SLUDGE
- [ ] 4. GAS

B. WASTE CHARACTERISTICS

- [ ] 1. CORROSIVE
- [ ] 2. IGNITABLE
- [ ] 3. RADIOACTIVE
- [ ] 4. HIGHLY VOLATILE
- [ ] 5. TOXIC
- [ ] 6. REACTIVE
- [ ] 7. INERT
- [ ] 8. FLAMMABLE
- 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

No

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT 9.	AMOUNT	AMOUNT	AMOUNT	AMOUNT)	AMOUNT
UNIT OF MEASURE Tons	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE Tons	UNIT OF MEASURE
X (1) PAINT PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
X (5) OTHER (specify): Organic Residue Approximate Composition = Paraffins 48% + Resins 40% + Surface Soils 20%			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify)
			(6) CYANIDE	X (6) OTHER (specify): Alum sludge Al_2O_3 Silica FeO_3 TiO_2	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify)		

This figure is total collected

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X')			3. TOXICITY (mark 'X')				4. CAS NUMBER	5. AMOUNT	6. UNIT
	a. SOLID	b. LIQ.	c. VAPOR	a. HIGH	b. MED.	c. LOW	d. NONE			
Cn+C										

VII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

☐ A. HUMAN HEALTH HAZARDS

Continue On Page 5

VIII. HAZARD DESCRIPTION (continued)

T. MIDNIGHT DUMPING

U. OTHER (specify)

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS				
2. IN COMMERCIAL OR INDUSTRIAL AREAS				
3. IN PUBLICLY TRAVELLED AREAS				
4. PUBLIC USE AREAS (parks, schools, etc.)				

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
< 50 FT	To the Mobile River	NONE
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)**	**F. DIRECTION TO DRINKING WATER SUPPLY**
N. A.	N. A.	N. A.

G. TYPE OF DRINKING WATER SUPPLY

- ☐ 1. NON-COMMUNITY < 15 CONNECTIONS
- ☒ 2. COMMUNITY (specify town) > 15 CONNECTIONS — Connected To The Mobile Water Supply
- ☒ 3. SURFACE WATER
- ☐ 4. WELL

Continued From Page 8

WATER AND HYDROLOGICAL DATA (continu)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
		NONE		

I. RECEIVING WATER

1. NAME North Mobile Ind. Treatment Facility (For the Ind. Dis. Discharge)

☐ 2. SEWERS ☐ 3. STREAMS/RIVERS

☐ 4. LAKES/RESERVOIRS ☒ 5. OTHER (specify): P.O.T.W

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

P.O.T.W

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☒ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

	A. SOIL	X	B. BEDROCK (specify below)	X	C. OTHER (specify below)
X	1. SAND				Soil Surrounding the Surface Impoundments is of Sandy nature. The " " "
X	2. CLAY				Pond Alum Mud has 1 Foot of impervious clay as a Liner (Permeability 10^{-5} To 10^{-7} cm/sec)
	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)

☐ D. MODERATE (10 to .1 cm/sec.) ☐ E. LOW (.1 to .001 cm/sec.) ☒ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS:

H. DISCHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE | 2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

J. OTHER GEOLOGICAL DATA

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X') 1. YES	2. NO	3. UNKNOWN
N.P.D.E.S.	E.P.A. A.W.I.S.	AL. 0002747	2/13/95	Expired	X		

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☒ NONE ☐ YES (summarize in this space)

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition (Section II) information on the first page of this form.

(Supplemental Report)

1. TYPE OF IMPOUNDMENT
Settling Basin for "gene waste water"

2. STABILITY/CONDITION OF EMBANKMENTS
good

3. EVIDENCE OF SITE INSTABILITY (Erosion, Settling, Sink Holes, etc.)
☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
☒ YES ☐ NO

7. IMPOUNDMENT HAS LINER SYSTEM
☒ YES ☐ NO Cement Basin

7a. INTEGRITY OF LINER SYSTEM CHECKED
☐ YES ☒ NO

7b. FINDINGS
The Concrete Looked OK.

8. SOIL STRUCTURE AND SUBSTRUCTURE BASINS ARE protection by 4 inches of Reinforced Concrete with water seals at All Joints. Available Information for water wells indicate the Presence of Highly Permeable SANDS AT Relative Shallow Depths (50 FT. MSL OR Less). Underlying the Area, possibly To Depths of 100 Feet, ARE Quaternary-Age Alluvial Deposits of SANDS, CLAY, SILT, gravel, and CARBONACEOUS ORGANIC MATERIAL.

9. MONITORING WELLS
☐ YES ☒ NO

10. LENGTH, WIDTH, AND DEPTH
LENGTH 90 WIDTH 90 DEPTH 6 FT

11. CALCULATED VOLUMETRIC CAPACITY
37,000 cu. FT (7.48052) = 282,763.66 gallons

12. PERCENT OF CAPACITY REMAINING
50%

13. ESTIMATE FREEBOARD
VARies Daily. Any overflow will go into The Alum MUD impoundment

14. SOLIDS DEPOSITION
☒ YES ☐ NO

15. DREDGING DISPOSAL METHOD
EXCAVated and hauled To BRUNSON IND. LANDFILL

16. OTHER EQUIPMENT
N. A.

EPA Form T2070-3C (10-79)

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
Alum mud impoundment

2. STABILITY/CONDITION OF EMBANKMENTS
good

3. EVIDENCE OF SITE INSTABILITY (Erosion, Settling, Sink Holes, etc.)
[X] YES [ ] NO Erosion

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
[ ] YES [X] NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
[X] YES [ ] NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
[X] YES [ ] NO

7. IMPOUNDMENT HAS LINER SYSTEM * 1 feet of impervious Clay at the bottom
[X] YES [ ] NO

7a. INTEGRITY OF LINER SYSTEM CHECKED
[ ] YES [X] NO

7b. FINDINGS
Vestor Thompson [illegible] Lab at mobile checked the liner system. Report submitted on March 25, 1977.

8. SOIL STRUCTURE AND SUBSTRUCTURE
Pond is protected by 1 ft. of impervious Clay liner. [illegible] [illegible] indicate the presence of highly permeable sands at [illegible] [illegible] (5 feet [illegible] or less). Underlying the area, possibly to depths of 100 feet, are Quaternary age alluvial deposits of sand, clay, silt, gravel & organic material (carbonaceous)

9. MONITORING WELLS
[ ] YES [X] NO

10. [illegible] AND DEPTH
[illegible] ft WIDTH 650 ft DEPTH [illegible]

11. CALCULATED VOLUMETRIC CAPACITY
(2,037,750 Cu.FT) (7.48052) = 15,243,429.63 gallons

12. PERCENT OF CAPACITY REMAINING
75%

13. ESTIMATE FREEBOARD
3 FT

14. SOLIDS DEPOSITION
[X] YES [ ] NO

15. DREDGING DISPOSAL METHOD
Excavated and hauled to Brunson Landfill.

16. OTHER EQUIPMENT

N.A.

EPA Form T2070-3C (10-79)

File: Am. Cyanamid (Mobile Co.)

February 7, 1980

Mr. John DiFlacido
Regional Production Manager
American Cyanamid Company
P. O. Box [illegible]
Mobile, Alabama 36601

Dear Mr. DiFlacido:

[illegible]

[illegible] disposal [illegible] techniques [illegible] are disposed of [illegible]

We thank you [illegible] If you have any [illegible]

[illegible] Environmentalist
[illegible] Solid [illegible]

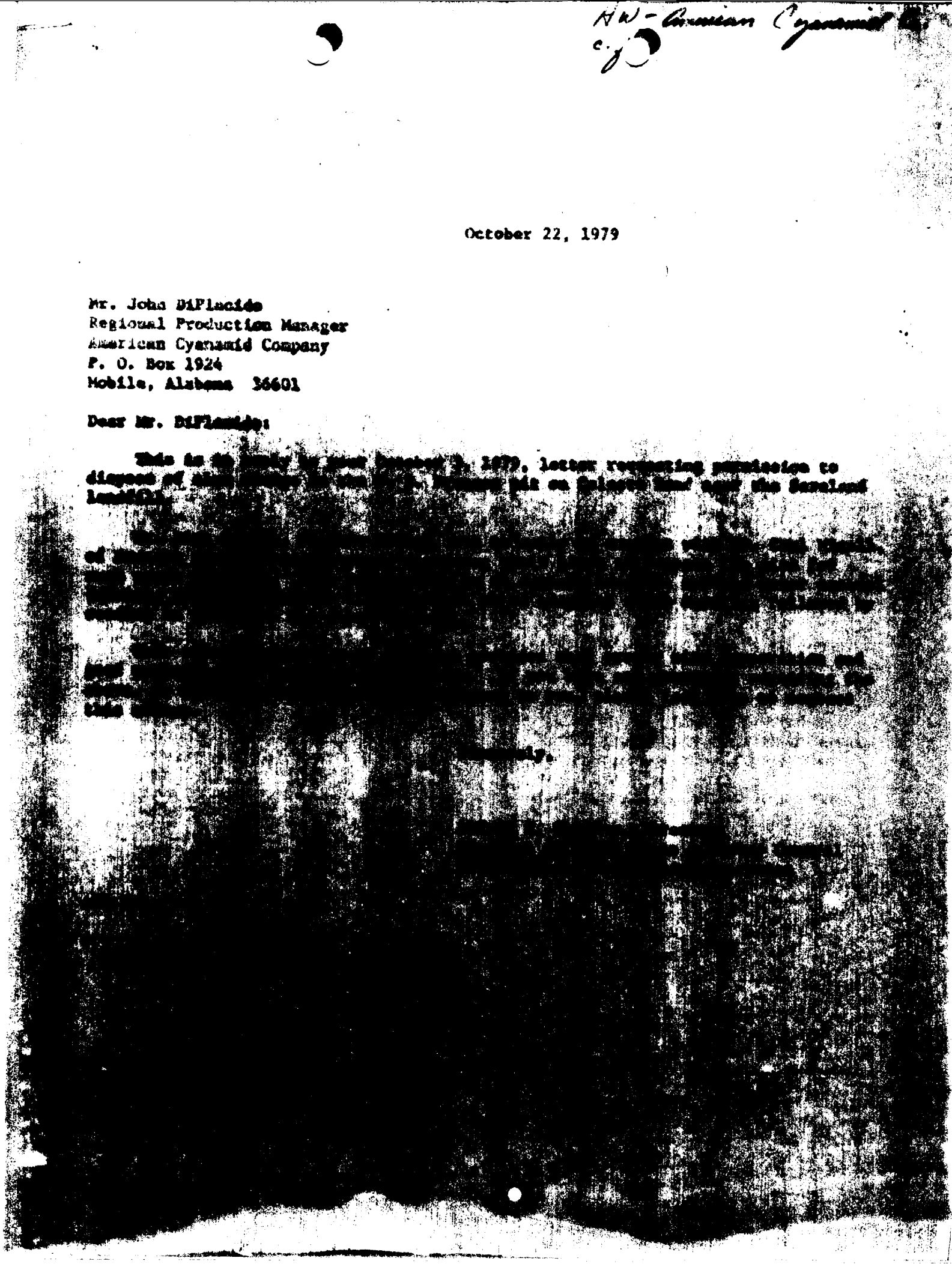
JAC:[illegible]

NW-American Cyanamid
c.j.

October 22, 1979

Mr. John DiFlacido
Regional Production Manager
American Cyanamid Company
P. O. Box 1924
Mobile, Alabama 36601

Dear Mr. DiFlacido:



CYANAMID

American Cyanamid Company
P.O. Box 1924
Mobile, AL 36601
(205) 457 6601

October 3, 1979

Mr. John Poole, Engineer, Technical Staff
Alabama Water Improvement Commission
State Office Building
Montgomery, AL 36130

Mr. Alfred S. Chipley, Director
Division of Solid Waste & Vector Control
Environmental Health Administration
State Office Building
Montgomery, AL 36130

RECEIVED

OCT 4 1979

STATE HEALTH DEPARTMENT
DIVISION OF SOLID WASTE
& VECTOR CONTROL

Mr. Danny Herrin
Acting Director
Division of Air Pollution Control
Mobile County Board of Health
P. O. Box 2867
Mobile, AL 36604

Dear Sirs:

Regarding NPDES Permit No. AL0002747, specifically, the Alum Waste Impound:

The alum impound has been in service since June 30, 1977 and is presently approximately 65% filled. It is proposed to divide the impound with a new dike and excavate about 50,000 cubic yards from one-half while discharging into the other. The impound will remain divided on a permanent basis and it is estimated one-half will require excavation every two years at present production volumes.

Disposal of these solids will be in the site previously approved for this type waste material. This site is the W. D. Brunson pit near the Saraland Landfill (please refer to the Engineering Report prepared by J. B. Converse & Co., Inc. and submitted December, 1976).

When deposited in the approved disposal site, the solid waste material will be covered with a layer of impervious clay material as was done in the past.

Your approval to again dispose of these solids is respectfully requested. Your early consideration and response in the matter will be greatly appreciated.

Very truly yours,

AMERICAN CYANAMID COMPANY

John DiPlacido
Regional Production Manager

JD/rmh

STATE OF ALABAMA

WATER IMPROVEMENT COMMISSION

Ira L. Myers, M.D
Chairman, State Health Officer

John W. Hodnett
Vice Chairman
Commissioner, Department of
Conservation and Natural Resources

Perry Hill Office Park
3815 Interstate Court
Montgomery, Alabama

James W. Warr
Chief Administrative Officer

Commission Members:
Sam Dyson, Fairhope
Dr. Robert M. Bucher, Mobile
Charles O. Cargile, Hueytown
Louis Grabensteder, Huntsville
David L. Thomas, Montgomery

Mailing address:
State Office Building
Montgomery, AL 36130

Telephone 205/277-3630

December 16, 1977

RECEIVED
DEC 19 1977
ST
DIVI
& VE

Mr. John DiPlacido
Regional Production Manager
American Cyanamid Company
Post Office Box 1924
Mobile, Alabama 36601

Dear Mr. DiPlacido:

This is in response to your December 7, 1977, request for approval to dispose of wastewater treatment solids by landfilling in a site previously used for alum waste disposal.

Based on available data, the Commission's technical staff has no objection to the proposed disposal method provided water quality in the disposal area is not degraded. This is, of course, contingent upon appropriate approvals from the Alabama Department of Public Health, Division of Solid Waste and Vector Control, and the Mobile County Health Department.

By copy of this letter, we are advising the Division of Solid Waste and Vector Control of your request for approval.

Yours very truly,

Carl D. Nelson
Engineer, Technical Staff
Water Improvement Commission

CDN:dst

cc: Mr. Alfred S. Chipley, w/enc.
Mr. Johnny Sanders
Mobile Office, w/enc.

CYANAMID

AMERICAN CYANAMID COMPANY

POST OFFICE BOX 1924, MOBILE, ALA. 36601

AREA CODE 205 XXXXXXXX 457-6601

December 7, 1977

Mr. Carl D. Nelson
Engineer, Technical Staff
Alabama Water Improvement Commission
State Office Building
Montgomery, AL 36130

Mr. Johnny W. Sanders, PE
Chief Engineer
Division of Air Pollution Control
Mobile County Board of Health
P. O. Box 2867
Mobile, AL 36604

Dear Sirs:

Regarding NPDES Permit No. AL0002747, specifically, Discharge Serial 002:

The holding basin has accumulated solids in each compartment. We propose to remove the liquid by pumping from the first compartment into the second, then to remove the solids from the first compartment and dispose of them at an approved disposal site. While accomplishing this removal normal operations in the second compartment will be maintained. When the clean out of the first compartment has been completed, the procedure as outlined above will be repeated for cleaning out the second compartment.

Disposal of these solids in the site previously approved for the disposal of our alum muds waste material is proposed. This site, is the W. D. Brunson pit near the Saraland Landfill (please refer to the Engineering Report prepared by J. B. Converse & Co., Inc. and submitted December, 1976).

An estimated 200 cubic yards of non-toxic solid waste material is to be removed from the holding basin. This material is composed largely of surface soils, rosins, paraffin waxes and small amounts of polymers. The pH of the moisture contained in these solids usually runs in the upper side of the permitted range (8.0-9.0).

When deposited in the approved disposal site, the solid waste material will be covered with a layer of impervious clay material as was the alum waste.

RECEIVED

DEC 8 1977

WATER IMPROVEMENT COMMISSION

Although an exact figure is not predictable regarding the frequency at which the proposed clean outs will be necessary it is estimated that it will be required two or three times annually.

Your approval to dispose of these solids from the holding basin compartments as outlined in the preceding paragraphs is respectfully requested. Your early consideration and response in this matter will be greatly appreciated.

Very truly yours,

AMERICAN CYANAMID COMPANY

John DiPlacido

John DiPlacido
Regional Production Manager

JD/rmh

CC: Messrs. P. T. Riffe
W. Askins
J. Von Sprecken

GEOLOGICAL SURVEY OF ALABAMA

A. CHARLES FREEMAN
Attorney

GEORGE W. SWINDEL, JR.
Director,
Administrative Services

THORNTON L. NEATHERY
Director,
Budget & Program Development

W. EVERETT SMITH
Director,
Technical Operations

THOMAS J. JOINER
Acting
State Geologist and Oil and Gas Supervisor

TECHNICAL DIVISIONS
WATER RESOURCES
H. C. Barksdale, Chief

MINERAL & ENERGY RESOURCES
P. A. Boone, Chief

GEOLOGY
C. W. Copeland, Jr., Chief

ENVIRONMENTAL
R. L. Chermock, Chief

GEOCHEMISTRY & WATER QUALITY RESEARCH
A. M. Malatino, Chief

PUBLICATIONS
T. V. Stone, Chief

April 14, 1977

Mr. Richard T. Maddox
Engineer, Technical Staff
Water Improvement Commission
Montgomery, Alabama 36109

Dear Mr. Maddox:

This is in reference to a request by your office for a re-visit, and inspection, of the W. D. Brunson pit, being used, presently, as a disposal point for alum mud. The pit, as you are aware, is located along Celeste Road in east-central Mobile County. The Geological Survey of Alabama is carrying out a program of geologic and hydrologic studies in connection with specific problems of potential pollution in cooperation with the Water Improvement Commission and the State Health Department.

The above-referred pit was field-inspected on April 11, 1977. Construction of the alum mud landfill, reportedly underway about one month, is approximately one-half complete.

To-date progress, as observed or inferred, is outlined below for your reference:

1. The area in the central part of the pit underlain by permeable sands has reportedly been cored and backfilled with on-site clay.

2. The bottom and sides of the landfill are irregularly shaped. The uneven configuration apparently is the result of minimum cut-and-fill.

RECEIVED
APR 19 1977
WATER IMPROVEMENT COMMISSION

3. Ponded water is present in the lower (southern) end of the fill area. Wet alum mud deposited on the up-slope (nortneast) side probably contributes some drainage to the pond; other sources include rainfall.

4. No downgradient (W) seepage of alum leachate was noted on April 11. Wet clays, however, were observed in this direction. Rainfall is probably contributive to this condition.

5. An adequate cover is not being installed on the landfill. On April 11, sandy (permeable) sediments were being hauled to, dumped and graded on the landfill surface. Mr. Brunson was made aware (on April 13) that a layer of (low permeable) clay is needed as a final cover for the landfill to prevent its eventual saturation by rainfall.

Sincerely yours,

GEOLOGICAL SURVEY OF ALABAMA

Robert V. Chandler, Head
Monitoring Section
Water Resources Division

xc: Dan Cooper

EPA

POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION: IV | SITE NUMBER: ALD 008 175 408

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
American Cyanimide	Cyanimide Rd	
C. CITY	D. STATE	E. ZIP CODE
Mobile	AL	36633

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED -- ~~NO HAZARD~~	X				
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*					
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION NEEDED *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION

This is an interim status facility

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*	G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Elizabeth M Shaver	(404) 881-2234	10-1-85

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

[redacted]

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo, day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION (1)				
(2)				
(3)				
b. TYPE OF MONITORING (1)				
(2)				
c. TYPE OF SAMPLING (1)				
(2)				

Continue On Reverse

Continued From Front

III. INVESTIGATIVE ACTIVITY NEEDED and PART B - PROPOSED INVESTIGATIVE ACTIVITY *(Continued)*

d. TYPE OF LAB ANALYSIS (1)				
(2)				
e. OTHER *(specify)* (1)				
(2)				

C. ELABORATE ON ANY OF THE INFORMATION PROVIDED IN PART B *(on front & above)* AS NEEDED TO IDENTIFY ADDITIONAL INVESTIGATIVE WORK.

D. ESTIMATED MANHOURS BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES	1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES
a. EPA		b. STATE	
c. EPA CONTRACTOR		d. OTHER *(specify)*	

IV. REMEDIAL ACTIONS

A. SHORT TERM/EMERGENCY STRATEGY *(On Site & Off-Site)*: List all emergency actions needed to bring site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the space below.

1. ACTION	2. EST. START DATE *(mo,day,&yr)*	3. EST. END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State, Private Party)*	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

B. LONG TERM STRATEGY *(On Site & Off-Site)*: List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. EST. START DATE *(mo,day,&yr)*	3. EST. END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State Private Party)*	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

C. ESTIMATED MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES	1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES
a. EPA			b. STATE		
c. PRIVATE PARTIES			d. OTHER *(specify)*		

2. PROJECT MANAGEMENT SUMMA

Site Name: AMERICAN CYANAMID

Site Number: ALD 008175408

Owner: AMERICAN CYANAMID

Operator: —

Site Status: ☒ Active ☐ Inactive ☐ Unknown

Priority: ☐ High ☐ Medium ☐ Low ☒ None

3. FINAL DISPOSITION

I. EPS Final Review - Date: 9/9/85

Comments:

Site Inspection Required ☐ Yes ☒ No

II. ADEM Review - Date: 9/24/85 SCM

Comments:

Follow-up Action Required ☐ Yes ☒ No

III. Final Disposition:

Review & revise	Date:	
Edited & correct	Date:	
Transmitted	Date:	
File close-out	Date:	
Initiate site inspection	Date:	

4. ADDITIONAL COMMENTS (ONGOING & FINAL)

TO THE BEST OF OUR KNOWLEDGE THIS IS A RCRA FACILITY ONLY

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
EPS FORM 3012-III

INDUSTRIAL NARRATIVE SHEET

1. Site Identification:

Site number: ALD008175408

Site name: American Cyanamid

Site county: Mobile

2. Industrial Narrative Summary:

Company Name: American Cyanamid

Address: P. O. Box 1924
Mobile, AL 36633

Telephone No.: 205/457-6601

Contact: Mr. Ron B. Melton

Discussion: American Cyanamid in Mobile, Alabama, is a producer of alum, sizing for paper products, and synthetic resins. An Eckhardt report performed in 1980 found no major problems. The plant is currently regulated by a RCRA Part A permit. Action is now being taken to review their Part A and determine if a Part B is needed or if they can withdraw their Part A altogether. Their wastewater is received by International Paper which operates an NPDES permitted wastewater treatment facility. They currently have on site an impoundment for settling alum sludge. This sludge is disposed of in local sanitary landfills as non-hazardous. Groundwater wells sampled on site were quite normal for the area.

3. Disposition:

No further action needed at this time. This is a current RCRA facility.

4. Comments:

NA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
EPS FORM 3012-II

TELEPHONE LOG SHEET

1. Site Identification:
   Site number: ALD008175408
   Site name: American Cyanamid

2. Interview Data: (Party called)
   Name: MR. Ron B. Melton
   Position: Plant Manager
   Firm: American Cyanamid
   Address: P.O. Box 1924
   Mobile, AL 36633
   Telephone No.: 205/457-6601

3. EPS Analyst Data:
   Name: Jim Duncan
   Purpose of call: PA Information

   Form 2070-12 (7-81) P.N.
   Date of call: 9/4/85

4. Interview Narrative Summary: Mr. Melton gave directions to the site as follows: South on 43 til Papermill Rd. then turn left, go 3/4 mile then left again on Cyanamid Rd. Plant is 3/4 mile on Cyanamid Rd. Mr Melton stated that the site has been operated since 1939 by Cyanamid. He said their products where alum, paper + water treatment chemicals. They are presently reviewing their RCRA permit for possible withdraw. He said their 1984 Generator reports show a one time disposal of bad feedstock and they normally generate no waste. He stated that their waste water goes to a treatment system owned by International Paper.

5. Disposition/Comments:

6. Comments: Any additional sites used by this company?
   Location:
   Dates of use:
   Description of waste:

   Comments:

ENVIRONMENTAL PROTECTION SYSTEMS, INC.

Alabama RCRA 3012 Site Ranking Scheme
EPS Form 3012-V

Site Name American Cyanamid
Site Number ALD008175408

Preliminary Assessment Ranking Scheme to Determine Which Sites Merit Further Action.

(Select one answer for each of the following seven questions)

1.	Are Hazardous Substances Present?		
	A. Confirmed on site!	10 points	
	B. Suspected at site!	5 points	
	C. It is unknown!	2 points	
	D. No hazardous substances	0 points	
	E. RCRA facility only!	0 points	x
2.	Is There a Pollution Dispersal Pathway?		
	A. Direct to surface and/or groundwater.	5 points	
	B. Indirect to surface and/or groundwater.	4 points	
	C. Suspected to surface and/or groundwater.	3 points	
	D. Not known for sure.	2 points	
	E. No pathway.	0 points	
3.	Characteristics of Human Population?		
	A. High density.	5 points	
	B. Medium density.	4 points	
	C. Low density.	3 points	
	D. No population.	2 points	
4.	Characteristics of Natural Environment?		
	A. Critical habitat including endangered species, etc.	5 points	
	B. Sensitive habitat.	3 points	
	C. Common less sensitive habitat.	2 points	
5.	How is Human Population Affected By Site?		
	A. Public utility of drinking water from site.	5 points	
	B. Direct public access to site.	4 points	
	C. Public access to affected surface water.	3 points	
	D. Only potential for human population contact.	2 points	
	E. Low or no potential for contact.	1 point	
6.	Facility Management Practices at Site?		
	A. Site actively supervised and managed currently with monitoring reports and other permit and report requirements.	1 point	
	B. Site inadequately managed records not up-to-date.	3 points	

C. Site not currently managed or regulated. 4 points _____

D. Abandon site. 5 points _____

7. Potential Responsible Parties for Site Operations?

A. Controlling party identified and accepts responsibility for site. 1 point _____

B. Suspected controlling party identified but does not accept responsibility for site. 4 points _____

C. No responsible party available. 5 points _____

Ranking Score =

$$\frac{0}{\#1} \times \left[\frac{N/A}{\#2} + \frac{N/A}{\#4} + \left(\frac{N/A}{\#3} \times \frac{N/A}{\#5} \right) + \frac{N/A}{\#6} + \frac{N/A}{\#7} \right]$$

TABLE 1. Ranking Assessment

NUMERICAL RANGE	PRIORITY ASSESSMENT
0-50	NONE
50-150	LOW
150-300	MEDIUM
300-450	HIGH

Ranking Score: 0

Priority Assessment: NONE

POTENTIAL HAZARDOUS WASTE S:
PRELIMINARY ASSESSMENT
EPS FORM 3012-I
EPS ANALYST/REVIEWER CHECKLIST

Site No. ALD008175408
Site Name American Cyanamid

Instructions: To be used in conjunction with EPA Form 2070-12 (7-81). Attach on inside front of site folder. Initial and date for all assessment entries under appropriate part/subpart as completed. initial/date in black for final assessment; in red if higher level (additional) assessment is in order. Follow same procedure for review process.

Review Codes: 1-Toxicology Review; 2-Chemical Review; 3-Ecology Review; 4-Chemical Engineer Review; 5-Geotechnical Review; 6-Project Manager Review; 7-Final Review

1. ANALYST/REVIEW STATUS

Form 2070 Part Number	Analyst/ Date	Review Code 1	Review Code 2	Review Code 3	Review Code 4	Review Code 5	Review Code 6	Review Code 7
I.I.-VI.	JH 9/3/85						JMW 9/9	JMW 9/9
2.I.								
2.II.								
2.III.								
2.IV.								
2.V.								
2.VI.								
3.I.								
3.II.A								
3.II.B								
3.II.C								
3.II.D								
3.II.E								
3.II.F								
3.II.G								
3.II.H								
3.II.I								
3.II.J								
3.II.K								
3.II.L								
3.II.M								
3.II.N								
3.II.O								
3.II.P								
3.III.								
3.IV.								
3.V.								

*No further assessment/review required, enter NA

28/41%

RATING FORM FOR WASTE DISPOSAL SITES

NAME OF SITE AMERICAN CYANAMIDE (ACTIVE) INACTIVE (CIRCLE ONE)

LOCATION MOBILE, ALABAMA

OWNER/OPERATOR AMERICAN CYANAMIDE

RATING FACTOR	SOURCE AND BASIS OF INFORMATION	SITE RATING 0	1	2	3	MULTIPLIER	SITE SCORE	MAXIMUM POSSIBLE SITE SCORE
WASTE CHARACTERISTICS								
QUANTITY OF HAZARDOUS WASTES	EPA file	✓				6	0	18
TOXICITY	EPA file	✓				7	0	21
PERSISTENCE					✓	5	15	15
RADIOACTIVITY	EPA file	✓				5	0	15
IGNITABILITY	NFPA	✓				3	0	9
REACTIVITY	EPA file	✓				3	0	9
CORROSIVITY	EPA file	✓				3	0	9
INFECTIOUSNESS	EPA file	✓				3	0	9
SOLUBILITY	judgement				✓	4	12	12
VOLATILITY	EPA file	✓				4	0	12
PHYSICAL STATE			✓			4	4	12
						TOTALS	31	141
ADDITIONAL POINTS FOR LARGE WASTE QUANTITIES								24
ADDITIONAL POINTS FOR OTHER WASTE CHARACTERISTICS								15
RECEPTORS								
POPULATION IN 1,000 FEET	EPA file	✓				12	0	36
DISTANCE TO NEAREST DRINKING-WATER WELL	assumed			✓		8	16	24
DISTANCE TO NEAREST OFF-SITE BUILDING	assumed			✓		8	16	24
ZONING/LAND USE	EPA file	✓				6	0	18
ENDANGERED SPECIES OR CRITICAL HABITATS	assumed	✓				6	0	18
						TOTALS	32	120
ADDITIONAL POINTS FOR OTHER RECEPTORS								30

PATHWAYS

EVIDENCE OF CONTAMINATION	Assumed	✓				12	0	36
DISTANCE TO NEAREST SURFACE WATER	assumed			✓		8	16	24
DEPTH TO GROUNDWATER	EPA file			✓		7	14	21
SOIL PERMEABILITY	EPA file	✓				6	6	18
NET PRECIPITATION	NOAA				✓	6	18	18
DEPTH TO BEDROCK	assumed			✓		4	8	12
BEDROCK PERMEABILITY	assumed			✓		4	8	12
						TOTALS	64	141

ADDITIONAL POINTS FOR OTHER PATHWAYS	20

WASTE MANAGEMENT PRACTICES

SITE SECURITY	EPA file	✓				8	0	24
INCOMPATIBLE WASTES	EPA file	✓				5	0	15
RATIO OF HAZARDOUS TO NON-HAZARDOUS WASTE QUANTITIES	Assumed	✓				5		15
ISE AND CONDITION OF CONTAINERS	EPA file	✓				4	0	12
E OF LEACHATE COLLECTION SYSTEM	assumed				✓	4	12	12
USE OF LINERS	EPA file	✓				4	0	12
						TOTALS	12	90

ADDITIONAL POINTS FOR OTHER WASTE MANAGEMENT PRACTICES	0 / 20

NUMBER OF MISSING OR ASSUMED VALUES = 12 OUT OF 29.

PERCENTAGE OF MISSING OR ASSUMED VALUES = 41 %

TOTAL SITE SCORES 139

TOTAL ADDITIONAL POINTS 0

TOTAL SCORE 139
(SITE SCORES PLUS ADDITIONAL POINTS)

TOTAL MAXIMUM POSSIBLE SITE SCORE 492

NORMALIZED SCORE 28
(TOTAL SCORE DIVIDED BY MAXIMUM SCORE AND MULTIPLIED BY 100)

COMMENTS:

PREPARED BY: Edward Sa ON 6/3 1990

M.2 - SITE MAINTENANCE FORM

ACTION: _

EPA ID : ALD008175408

SITE NAME: AMERICAN CYANAMID MOBILE PLANT SOURCE: H

STREET : CYANAMID RD CONG DIST: 01

CITY : MOBILE ZIP: 36633

CNTY NAME: MOBILE CNTY CODE : 097

LATITUDE : 30/44/05.4 LONGITUDE : 088/03/02.9

L OURCE: R LL-ACCURACY:

SMSA : 5160 HYDRO UNIT: 03160204

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N

NPL IND: N NPL LISTING DATE: NPL DELISTING DATE:

SITE/SPILL IDS:

RPM NAME: BETSY SHAVER RPM PHONE: 404-881-2234

SITE CLASSIFICATION: SITE APPROACH:

DIOXIN TIER: REG FLD1: REG FLD2: 1

RESP TERM: PENDING ( ) NO FURTHER ACTION ( )

PENDING (_) NO FURTHER ACTION (_)

ENF DISP: NO VIABLE RESP PARTY ( ) VOLUNTARY RESPONSE ( )
ENFORCED RESPONSE ( ) COST RECOVERY ( )

SITE DESCRIPTION:

M.2 - PROGRAM MAINTENANCE FORM

* ACTION: _ *

SITE: AMERICAN CYANAMID MOBILE PLANT

EPA ID: ALD008175408 PROGRAM CODE: H01 PROGRAM TYPE: * _ *

PROGRAM QUALIFIER: ALIAS LINK : * ___ __ *

PROGRAM NAME: SITE EVALUATION * _____ *

DESCRIPTION:

* _____ *

* _____ *

* _____ *

* _____ *

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: AMERICAN CYANAMID MOBILE PLANT
PROGRAM: SITE EVALUATION

EPA ID: ALD008175408 PROGRAM CODE: H01 EVENT TYPE: DS1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ ___ _ *

EVENT NAME: DISCOVERY STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 06/01/79	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: AMERICAN CYANAMID MOBILE PLANT
PROGRAM: SITE EVALUATION

EPA ID: ALD008175408 PROGRAM CODE: H01 EVENT TYPE: PA1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: S * _ ___ _ *

EVENT NAME: PRELIMINARY ASSESSMENT STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START: 09/30/85	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 09/30/85	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - COMMENT MAINTENANCE FORM

SITE: AMERICAN CYANAMID MOBILE PLANT

EPA ID: ALD008175408

COM NO	COMMENT	ACTION	
001	PART A- ON FILE	_	
002	SITE INSPECTION WAS COMPLETED BY TH	_	
	E STATE 80/03; FOR FINAL		
	DISPOSITION 81/09	_	

M.2 - REGIONAL UTILITY MAINTENANCE FORM

SITE: AMERICAN CYANAMID MOBILE PLANT

EPA ID: ALD008175408

REG CODE: HSCA-01 * ACTION: _ *
DESCRIPTION: ACIDS * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: HSCB-01 * ACTION: _ *
DESCRIPTION: ALUM SLUDGE * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: HSCS-01 * ACTION: _ *
DESCRIPTION: TOLUENE * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

M.2 - REGIONAL UTILITY MAINTENANCE FORM

SITE: AMERICAN CYANAMID MOBILE PLANT

EPA ID: ALD008175408

REG CODE: HSC8-01 * ACTION: _ *
DESCRIPTION: ALUM SLUDGE * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
E3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: OPDS-01 * ACTION: _ *
DESCRIPTION: IMPOUNDMENT FOR ALUM SLUDGE * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: OPD7-01 * ACTION: _ *
DESCRIPTION: SOIL CONTAMINATION - TOLUENE SPILLS * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

M.2 - REGIONAL UTILITY MAINTENANCE FORM

SITE: AMERICAN CYANAMID MOBILE PLANT

EPA ID: ALD008175408

REG CODE: RCRA-01 * ACTION: _ *
DESCRIPTION: RCRA REFERRAL * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
D _3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: 4C85-01 * ACTION: _ *
DESCRIPTION: CERCLA FY85 COOPERATIVE AGREEMENT * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: 4REF-01 * ACTION: _ *
D CRIPTION: REFERRED TO RCRA. INTERIM STATUS FACILITY * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: RCRA * _____ *

M.2 - REGIONAL UTILITY MAINTENANCE FORM

SITE: AMERICAN CYANAMID MOBILE PLANT

EPA ID: ALD008175408

REG CODE: 4STS-01 * ACTION: _ *

DESCRIPTION: ECKHART SURVEY SITE * _____ *

* _____ *

DATE1: * __/__/__ *

DATE2: * __/__/__ *

DATE3: * __/__/__ *

FREE FIELD: * _____ *